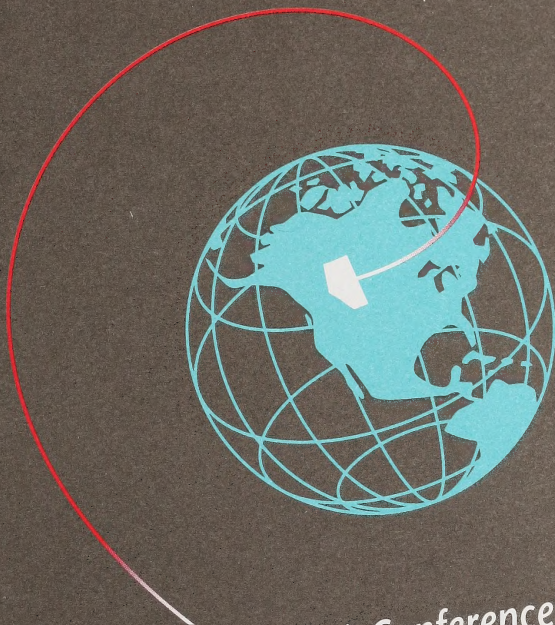


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Workbook



Premier's Conference
On Alberta's
Economic Future

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TOWARD
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WELCOME

TOWARD
TOGETHER



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How to Participate in this Conference

Step One Pre-registration

You must pre-register for this conference. To pre-register, complete the postage-paid mailback card included in this package and return as soon as possible.

For convenience, you can fax the card to Alberta Economic Development and Trade in Edmonton, fax number: 422-9107. For further information, please contact Skye Page, 427-0670.

Step Two Choose a theme workshop

To complete the pre-registration card, you will need to indicate your preferences for six thematic areas. You will be assigned one theme for the entire conference, attending a series of workshops related to your theme area.

How do you choose a theme area? First of all, the subject should interest you.

Many of the conference delegates have been invited because they are stakeholders in a specific area which relates to one of the themes. If you are such a delegate, do not feel limited to your area of expertise in your selection of a theme. In order for the conference to be successful, the widest possible range of opinions is needed. You may be able to contribute creative and productive ideas in areas where you have little background!

The six thematic areas are reviewed in this workbook to help you familiarize yourself with some of the critical issues and concerns related to each area. You may wish to read those sections before you make your choice on the mailback card.

It may not be possible to give everyone their first choice of a theme area.

Step Three Registration

All participants will be required to register in person for the conference on the evening of Wednesday, May 27 or the morning of Thursday, May 28. At registration you will receive your delegate badge, an up-to-date pocket-sized conference guide with map, and other materials.

We look forward to seeing you there!

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	(Copies of documents related to these initiatives will be available throughout the Conference at the Alberta government Information Kiosk)

Conference Program

When	What	Where
May 27, 1992 Wednesday evening 7:00 – 10:00 p.m.	Registration/Reception Meet fellow delegates at a reception hosted by the Calgary Chamber of Commerce and City of Calgary. Background information on government programs and initiatives is available throughout the Conference at the Alberta government Information Kiosk.	Convention Centre Garden Terrace
May 28, 1992, Thursday 7:30 a.m.	Registration	Convention Centre Garden Terrace
8:30 - 10:00 a.m.	Opening Plenary Introductory comments by Premier Don R. Getty; Honourable Peter Elzinga; Honourable Rick Orman; Mr. Hal Wyatt, Conference Moderator; and Dr. Don Simpson, Banff Centre for Management. You will learn about the background for Toward 2000 Together and other government initiatives.	Convention Centre Macleod B, C & D
10:00 - 10:30 a.m.	Break	
10:30 a.m. - 12:30 p.m.	Small Group Workshops I At this first workshop you will create your vision of Alberta in the year 2000.	Breakout Rooms
12:30 p.m.	Lunch	Convention Centre Exhibition B
2:00 - 3:30 p.m.	Thematic Plenaries A speaker will set the stage for your theme to an audience of 75-100 delegates.	Convention Centre Skyline Hotel Performing Arts Centre
3:45 - 5:30 p.m.	Small Group Workshop II In discussion groups of 15-20 people, you will review the opportunities and constraints related to your theme.	Breakout Rooms
6:15 p.m.	Reception	Convention Centre Garden Terrace
7:00 p.m.	Dinner Speaker: Diane Francis <i>"Challenges Facing Alberta"</i> Editor of the Financial Post, Diane Francis is one of Canada's most influential financial writers. She has authored a number of books and appears regularly on radio and television.	Convention Centre Macleod A
10:00 p.m.	Reception Join the Honourable Elaine McCoy at a reception where the "Future of Work" video from the Department of Labour will be screened.	Convention Centre Macleod C

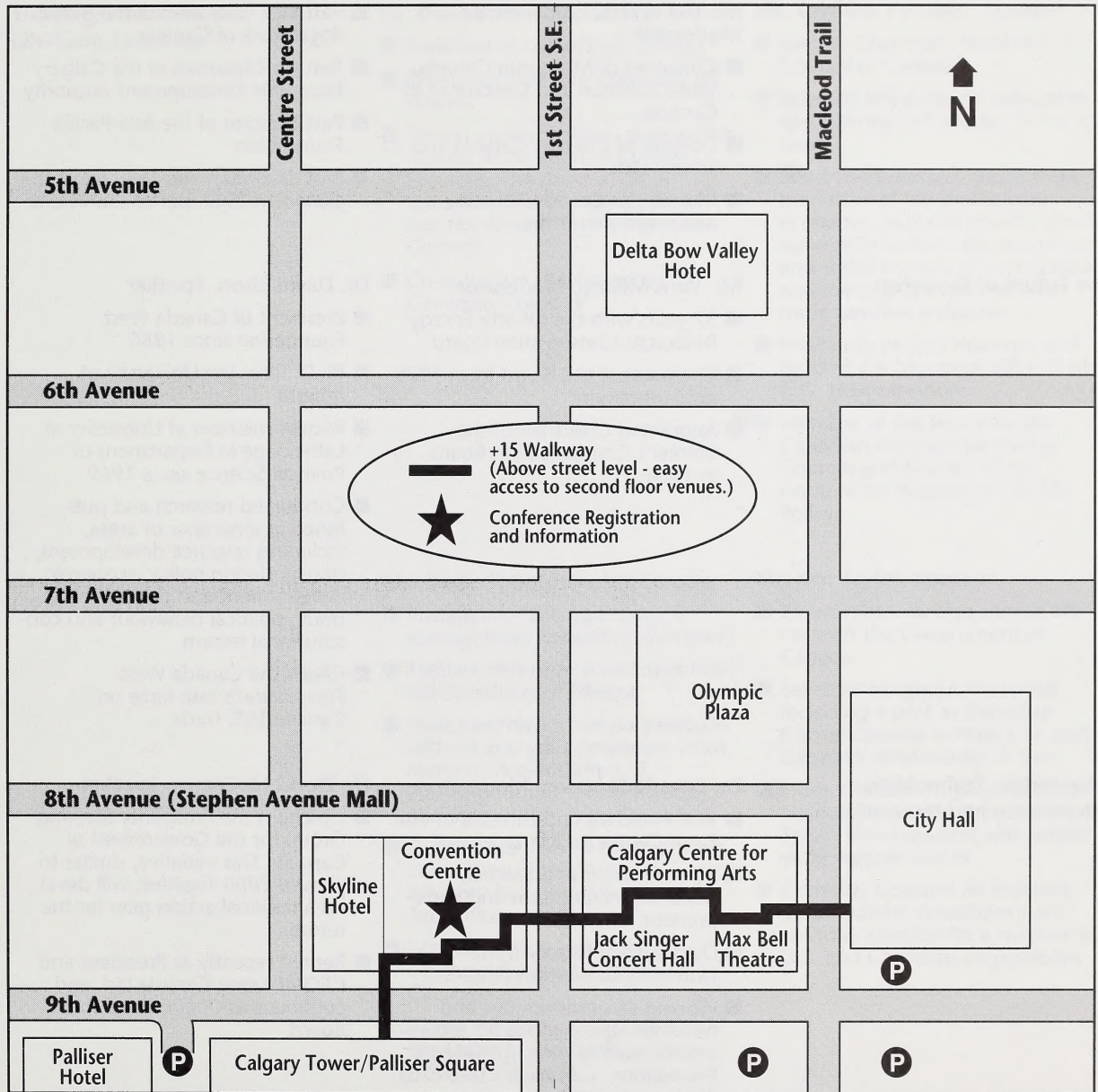
When	What	Where
May 29, 1992 Friday		
8:00 - 9:00 a.m.	Thematic Plenaries Hear the reports from the workshops on opportunities and constraints.	Convention Centre Skyline Hotel Performing Arts Centre
9:15 - 11:00 a.m.	Small Group Workshop III In discussion groups of 15-20 people, you will review the options and choices related to your theme.	Breakout Rooms
11:15 a.m. - 12:15 p.m.	Thematic Plenaries Hear the reports from the other workshops and prepare recommendations for the final plenary.	Convention Centre Skyline Hotel Performing Arts Centre
12:15 p.m.	Lunch	Convention Centre Macleod A
1:30 - 3:30 p.m.	Final Plenary Hear closing remarks from Premier Don R. Getty and Mr. Hal Wyatt, and a discussion of the next steps to be taken by the Alberta government.	Convention Centre Macleod B, C & D

Media Attendance

Please note that the entire conference will be open to the media, so that those Albertans not in attendance will have some access to the work being done over the two days. Print and electronic journalists will be present at the opening and closing plenaries as well as all of the theme plenaries. They may also attend some of the small group workshops.

Following the Conference, a report of the proceedings and key findings will be prepared and publicly released.

Map of Conference Facilities



Conference Moderators and Speakers

Mr. Hal Wyatt, Conference Moderator

- Chairman of Monsanto Canada, Vice-Chairman and Director of BP Canada
- Director of Chrysler Canada and Trimac Ltd.
- Member of Canada/Taiwan Advisory Committee

- Past Vice-Chairman of the Board, Royal Bank of Canada
- Past Co-Chairman of the Calgary Economic Development Authority
- Past Director of the Asia Pacific Foundation
- Past Chairman and Director of the Canadian Chamber of Commerce

The Future of Resources

Mr. Vern Millard, Moderator

- 37 years with the Alberta Energy Resources Conservation Board
- Chairman of the Board from 1978 until retirement
- Appointed Chairman of the Worker's Compensation Board in 1988

Dr. David Elton, Speaker

- President of Canada West Foundation since 1980
- Ph.D. from the University of Alberta
- Faculty member at University of Lethbridge in Department of Political Science since 1969
- Conducted research and published in a number of areas, including resource development, transportation policy, economic development and diversification, trade, political behaviour and constitutional reform
- Chairs the Canada West Foundation's task force on Canada/U.S. trade

Knowledge: Technology, Information and Innovation

Dr. Donald Simpson, Moderator

- Vice President and Director of The Banff Centre for Management
- 35 year career as a teacher, researcher, consultant and entrepreneur
- Doctorate in History from University of Western Ontario
- Worked in administrative and fund-raising capacities for organizations such as African Students Foundation, Canadian Crossroads Africa and CUSO
- Extensive academic work related to the global economy, including developing and teaching international courses

Dr. David McCamus, Speaker

- Co-chairs the Prosperity Steering Group for the Government of Canada. This initiative, similar to *Toward 2000 Together*, will develop a national action plan for the future
- Retired recently as President and CEO of Xerox Canada Ltd. and continues as Chairman of the Board

**Training, Education and
Life-Long Learning**

Dr. Donna Allan, Moderator

- President of Lethbridge College
- Doctorate from the University of Alberta
- Served on committees such as The Alberta Association of College Faculties, The Association of Canadian Community Colleges and the Alberta Teleconference Council
- Co-authored "Keyboarding for Canadian Colleges"

Ms. Caroline Pestieau, Speaker

- Deputy Chairman, Economic Council of Canada
- Directed the study on education and training in Canada, "A Lot to Learn"
- Supervised research projects on the future of the prairie grain economy, local community development initiatives, the economic and social impacts of immigration and managing adjustment for trade sensitive industries
- Previously project manager and head of the Montreal office of the C.D. Howe Institute
- Member of the Board for the Canadian Program for Global Change and director of the Institute for Research on Public Policy

**Competing in a
Global Economy**

Ms. Stella Thompson, Moderator

- President of Stirling Energy, a management consulting company
- Masters degree in economics from the University of Alberta
- Held a number of senior positions with oil and gas companies, most recently Vice-President of Planning, Business Information and Systems for Petro-Canada
- Current member of the executive committee of the National Advisory Board on Science and Technology
- Member of the University of Calgary's Capital Campaign Committee
- Chairs the Energy Committee of the Faculty of Management's Advisory Council

Mr. Ken Taylor, Speaker

- 25 years as a foreign service officer with the Government of Canada
- Served throughout the world, including a post as Canadian Consul General in New York and Canada's Ambassador to Iran
- From 1984-89 employed by RJR Nabisco, attaining the position of Senior Vice-President with world-wide responsibilities
- Currently operates an independent business consultancy and serves as director for a number of U.S. and Canadian corporations

Environment and Sustainable Development

Dr. Natalia Krawetz, Moderator

- Chief Executive Officer of the Environment Council of Alberta, a provincial crown corporation
- Executive Director of the Alberta Round Table on Environment and Economy
- Authored over 50 papers and reports on topics including impact assessment monitoring, public consultation processes and dealing with private sector change in the context of sustainable development

Mr. Ken McCready, Speaker

- President and CEO of TransAlta Utilities Corporation
- Chairman of the Alberta Round Table on Environment and Economy
- Member of the Business Council on National Issues and the Business Council for Sustainable Development
- Director of University Technologies International, Maloney Steel Ltd., Keyword Office Technologies, PanCanadian Petroleum Limited, and the Marigold Foundation

Community-Based Economic Development

Ms. Iris Evans, Moderator

- Reeve of the County of Strathcona
- Long career of public service, beginning with her election in 1977 as school trustee
- Chairman of the Strathcona School Board and the Alberta School Trustees Association 1980-88
- Serves on the Alberta Hospital and Medical Care Advisory Committee and the board of the Strathcona General and Auxiliary Hospital and Nursing Home District #108

Mr. Dale Dowell, Speaker

- Partner, Price Waterhouse, with extensive consulting experience in both private and public sectors
- MBA, University of Alberta
- Recently managed the preparation of a development strategy for Edmonton
- Currently directing a study of regional linkages for economic development in the metropolitan Edmonton area
- Specializes in strategic management and planning, financial and socio-economic analysis, and management systems design and evaluation

INTRODUCTION

TOWARD
TOGETHER



Introduction

In less than a decade, we will step across the threshold of a new century.

How will Alberta's business community have changed? Where will career opportunities be found? What kind of environment will our children inherit?

These are the questions we must answer together, in setting new directions to take Alberta into the 21st century. Our goal is to prepare the province to meet the coming challenges by uniting the energies of all Albertans.

It is clear that our world is changing around us — and continuing to change at an ever increasing pace. The nature of both public and private institutions is changing — the links between different sectors are changing — and society's expectations are changing.

For many of us, these changes have already had an impact on our lives — as workers or as parents, for example. We are all learning to live with a much greater degree of uncertainty in our lives than our grandparents could ever imagine.

However, it is not enough for us to only respond or adapt to change. With each change, comes a multitude of opportunities. And we must seize — even create — new opportunities if we want to continue to prosper in the coming years. Even though it is becoming increasingly difficult to forecast economic factors beyond a year or two, the need to think in the long term has never been greater. At the same time, business time spans and product cycles have shortened considerably, so we will also need to take advantage of short-term opportunities.

The challenge then for Albertans is to create a "vision" of our province in the 21st century. Where do we want to be? And what are the issues which need to be addressed in order for us to reach those goals? Finally, how do we know when we've "arrived"? Will we be able to measure how effectively we've adopted the new attitudes and mindset needed to be successful in the future?

This is what *Toward 2000 Together* is all about.

Toward 2000 Together Process

Initiated by the Alberta government in the summer of 1991, *Toward 2000 Together* is an opportunity for all Albertans to contribute their ideas and concerns regarding a new economic strategy for the province.

Why is a new economic strategy important? Many experts believe that the principal economic goal of a country is to provide a high and rising standard of living for its citizens. In the long run, productivity determines that standard of living. And in order to achieve sustained productivity growth, an economy must continually upgrade itself.

The *Toward 2000 Together* initiative is more than just an "opportunity" for Albertans to express their concerns. We need creative ideas and solutions from Albertans in all walks of life, because any economic strategy will have far-reaching effects in areas such as health and welfare, education and transportation.

Since the launch of the *Toward 2000 Together* program, over 20,000 copies of the government's discussion paper have been forwarded to interested individuals and organizations. The discussion paper outlines the major challenges facing the province, suggests a possible "vision" for the Alberta economy in the year 2000 and reviews a number of options and choices to be considered.

Public reaction to this document was sought through a variety of mechanisms over the fall and winter months:

- Over 3400 questionnaires distributed with the discussion paper were completed and returned by individuals and organizations;
- Written briefs were submitted; and
- Formal presentations were made at a series of Regional Public Forums throughout the province.

Concurrently, seven round table discussions were held across the province. These round tables were

Change can no longer be considered change; it is now the norm. As such, tomorrow's economic plans must anticipate rather than respond.

— Northern Telecom

The importance of government, business, labour and educators working together means success or failure for Alberta — the government's role is to somehow get these groups listening and responding.

— questionnaire respondent

organized by The Banff Centre for Management at arm's length from the government, in order to provide an additional non-partisan and independent source of public input. Summary reports of the Regional Public Forums and round tables have been produced.

Purpose of the Conference

The next stage in the *Toward 2000 Together* process is the Premier's Conference on Alberta's Economic Future in Calgary, May 27-29, 1992.

This Conference is intended to bring together representatives from key stakeholder groups and members of the general public for two days to review the input already received through the *Toward 2000 Together* public consultation process and other government initiatives. The objectives of the Conference are:

- To review and determine which are the most important issues associated with developing an economic strategy, based on the input to date;
- To explore the options and choices which have been suggested, to recommend priorities and to provide guidance in the development of a new economic strategy; and
- To ensure that the conclusions of the conference accurately reflect the needs and expectations of all Albertans. In addition to contributing their own personal and professional view points, Conference participants also have a responsibility to represent the views of what they perceive to be the majority of Albertans.

The results of this Conference as well as previous public input will provide the basis for the drafting of an economic strategy by the Alberta government later this year. Interested groups and individuals will have the opportunity to provide further input on the draft strategy before it is finalized and implemented.

The Workshops

There will be a series of workshops associated with each theme plenary

session. They are developed to give individuals of varying viewpoints an opportunity to meet, discuss and reason together while seeking areas of agreement and clarification of differences. These workshops will report their findings to the larger theme plenary sessions, which in turn will report their results to the main Conference plenary session.

Workbook Overview

This pre-conference workbook is being provided to all Conference participants. It serves as a starting point for the discussions which will take place during the Conference.

A separate report has been prepared to provide an overview of the comments Albertans have made in *Toward 2000 Together* questionnaires, in submissions and briefs, and at Regional Public Forums. This workbook attempts to synthesize the input received, as well as other key reports and government initiatives.

Six Themes

The response so far from Albertans to this initiative has been overwhelming. Albertans in all walks of life throughout the province have taken advantage of this opportunity to express their ideas and concerns.

In reviewing all the input submitted to date, a number of themes kept recurring — areas of concern felt across a wide cross-section of the population representing groups with different mandates. The information in this workbook has been organized according to these six themes. They are as follows:

1. The Future of Resources

In the past, Alberta's economic growth was driven by development of the resource industries, especially oil and gas and agriculture. To what degree will the resource industries be the impetus for our future growth? What diversification potential exists for encouraging "value-added" processing related to resources and to what degree should this be promoted? What new industries, if any, should be encouraged?

Canada's future competitiveness must be driven by a new paradigm, based on productivity and innovation.

— Michael Porter

2. Knowledge: Technology, Information and Innovation

As many economists and other experts have noted, there has been a strategic global shift from an industrial-based economy to an information-based economy. In this new economy we will be depending more on intellectual 'capital' for our success, and less on static advantages such as an abundance of natural resources. The ability to innovate will be key. How important will science, technology and industrial innovation be in accomplishing our objectives and how should they be encouraged?

3. Training, Education and Life-Long Learning

The continuing development of human resources is an important key to our success. In the future, people will be needing more and more specialized education, as well as upgrading and retraining throughout their working life. What sort of training and education will be needed to foster economic prosperity? What role will apprenticeship and co-op programs play? How do we encourage more scientific training and education? How do we encourage the values of life-long learning? Whose responsibility is education and training?

4. Competing in a Global Economy

In order to maintain our standard of living, businesses will be required more and more to compete in the global marketplace. Increasingly, competitiveness is being defined as the ability to innovate and adapt to rapidly changing markets and technologies. How do we capitalize on our strengths to enable Alberta businesses to succeed? How can we nurture our high performance industries? How do we fix our perceived weaknesses — or can they be repositioned as strengths? What role should the government play in helping business?

5. Environment and Sustainable Development

There is no doubt that protecting the environment is of utmost importance to Albertans. Sustainability will be the prerequisite for all types of new

development. Environmental goals will affect what we produce and where we sell it. At the same time, costs related to environmental protection cannot be ignored. The challenge then will be to integrate the concept of sustainable development into the economic decision-making process and to make progress on the economy and the environment at the same time.

6. Community-Based Economic Development

While one approach to economic development focuses on attracting outside investment, another places emphasis on seeing communities build on their individual strengths to achieve growth from within. How can communities capitalize on the initiative and entrepreneurial talents of their citizens? How can communities mobilize their efforts to maintain and enhance their quality of life? How can that quality of life become a strategic asset?

As you would expect in dealing with economic and social issues, multiple linkages between each of the themes exist. It is important that each of the themes be considered in the context of a new Alberta economic strategy rather than as detached elements. The themes have been developed to serve as the basis for the workshop discussions.

This workbook is intended to be used in conjunction with the workshops, but should also be read prior to the Conference. The first section, "The Alberta Economy," provides a strategic review of important changes which are occurring globally and why these changes are important to Alberta. The second section, "Vision," is the basis for the first workshop, in which you will develop your vision of Alberta's future. The remaining six "theme" sections will serve as the basis for the second and third workshops, in which you will discuss the opportunities and constraints for Alberta, and the options and choices for the future.

The Appendix provides information on other Alberta government consultation initiatives related to *Toward 2000 Together*.

Notes

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ALBERTA ECONOMY

TO TOWARD
TO TOGETHER



Introduction

Alberta has experienced dramatic economic changes over the past century. In the past, Native people enjoyed a lifestyle based on hunting, fishing, trapping and other traditional pursuits. With the settlement of farmers and ranchers in the late 19th and early 20th centuries, the province began to be dominated by agricultural activities. Since then, Alberta has evolved from a sparsely-populated, rural-oriented agricultural society to a highly advanced, industrialized and multi-faceted economy.

Growth in the economy has been particularly significant in more recent decades — in the past 30 years, Alberta's output of goods and services increased by more than 4.5 percent annually in real terms. That growth has crossed virtually all sectors of the economy and has been matched by rising incomes and standards of living. The quality of our social infrastructure — so important to a modern society — has improved substantially. As Albertans, we enjoy road, air transportation, and telecommunications networks, a modern and accessible health care system, many recreational and cultural amenities, and advanced educational and training facilities and services.

In looking toward and beyond the year 2000, a number of issues and concerns confront us. Can we as a province continue to grow and prosper as we have in the past? What activities, what industries, what jobs, what skills will generate the wealth needed to maintain and improve our well-being in the future? What must we do to realize our province's — and our own — potential?

These questions are central to the basic goal of our economic system: "creating wealth, and thus raising standards of living, in a sustainable way."

Evolution of Our Economy

Alberta's economic development over the past century can be broadly divided into two phases. During the first phase, lasting to about 1950, growth depended largely on the

agricultural sector. More than one-half of the province's population lived in rural areas until the early 1950s.

The year 1947 marked a significant turning point in the province's development — and the beginning of a transformation from an agrarian economy to a more industrialized and urbanized economy. Oil was discovered at Leduc in that year. Since then, the oil and gas industry has invested more than \$75 billion toward exploration and development in Alberta. Those expenditures, combined with ongoing operating costs, generated substantial employment and business activity across the province. In addition, the royalties, bonuses, Crown leases, and other revenues paid by the energy industry provided an important source of provincial revenues and supported the development of the advanced public infrastructure network we now enjoy.

The energy industry had a particularly dramatic effect from 1973 to 1983, when a sharp and sudden rise in energy prices generated a massive expansion in both the volume and value of oil and gas production.

Since 1984, natural gas prices have been halved, and oil prices are down about 25 percent, with lower levels of industry reinvestment. At the same time, the province's conventional oil reserves continue to be depleted, declining by more than two-fifths between 1979 and 1990. There is a general perception that this component of the industry has reached a mature stage of development.

The development of the province's large reserves of heavy oil and bitumen hold considerable long-term potential, but the development of those resources and the expansion of the province's natural gas industry continue to be restrained by relatively low energy prices.

The traditional importance of the energy sector has perhaps obscured the remarkable expansion in other parts of the Alberta economy. The value of shipments for the manufacturing sector, for example, has increased from less than \$5 billion annually in the mid-1970s to close to

ALBERTA FACTS AT A GLANCE

Area	661,185 sq.km.
Population (Oct. 1, 1991)	2,538,500
Median Age (Years)	30.9

The Economy 1991

Gross Domestic Product	\$ 73.7 Billion
Private & Public Investment	\$ 20.2 Billion
Manufacturing Shipments	\$ 18.5 Billion
Tourism Receipts	\$ 2.8 Billion
Exports	\$ 17.7 Billion
Retail Sales	\$ 18.9 Billion
Farm Cash Receipts	\$ 4.1 Billion
Value of Construction Work	\$ 14.0 Billion
Housing Starts	12,500 Units
Labour Force	1,357,000
Employment	1,246,000
Value of Mineral Production (includes oil and gas)	\$ 16.3 Billion

Sources: Statistics Canada 1991

Alberta Energy Resources Conservation Board

Alberta Economic Development & Trade

PERCENTAGE DISTRIBUTION OF GROSS DOMESTIC PRODUCT

	% 1980	% 1990
Manufacturing	7	8
Construction	8	6
Transportation & Utilities	8	11
Retail & Wholesale Trade	8	10
Minerals and Forestry (includes oil and gas)	34	21
Agriculture	4	3
Public Administration	5	5
Business & Community Services	15	20
Finance	11	16

Source: Alberta Bureau of Statistics

VALUE OF ALBERTA MANUFACTURING SHIPMENTS
1991 — Preliminary (millions)

Total Manufacturing Shipments	\$18,467
Food and Beverage	\$4,405
Petrochemicals and Plastics	\$3,377
Refined Petroleum Products	\$3,302
Forest Products	\$1,669
Fabricated Metal Products	\$969
Primary Metals	\$962
Printing and Publishing	\$738
Industrial Machinery	\$690
Electronics	\$672
Non-Metallic Mineral Products	\$563
Transportation Equipment	\$369
Other	\$751

Source: Statistics Canada

\$19 billion today, with the food processing, petrochemical and more recently, the forest products industries, demonstrating strong growth.

Alberta's advanced technology industries — which include medical research and biotechnology, electronics and telecommunications, advanced materials, and information technology — now employ more than 50,000 people. Much of the growth of this sector has occurred over the past 10 to 15 years.

And, finally, as in all advanced economies, our services sector has shown dramatic growth, accounting for more than three-fifths of total economic output. This sector includes a range of industries, such as business and financial services, transportation, tourism, retail trade, as well as health and education services.

A number of these new growth sectors were — and in some cases, continue to be — linked to the province's traditional strengths in natural resources. Petrochemical industries rely on the province's energy feedstocks; engineering, geophysical, and information processing services have developed from expertise in the oil and gas sector; livestock reproduction services and technologies have developed from the agriculture industry.

Our expanding non-traditional sectors — manufacturing, advanced technology and services — have tended to buffer the "boom and bust" cycles of our agriculture and petroleum sectors. Indeed, the relative strength of our provincial economy over the past few years — a difficult period for global commodity producers and for much of North America — demonstrates the merits of diversification and the degree to which it has occurred.

The development of a more diverse economy has been a conscious provincial objective for a number of years. The province has actively pursued a diversification strategy that has encouraged the further "value-added" processing of our natural resources, while at the same time

supporting new activities in non-traditional sectors.

Current Strengths and Challenges

Following are some of the key strengths of our current economy:

- an entrepreneurial, productive and relatively well-trained and educated labour force;
- a comprehensive and modern economic and social infrastructure;
- demonstrated global expertise in specific resource and advanced technology sectors;
- an historical export orientation — exports constitute almost one-quarter of our GDP, and while they are largely focused in the resources sector, they have provided the base for establishing international trading relationships;
- a society accustomed to operating in a dynamic setting and with the expectations and motivations for creating wealth; and
- a comparatively strong provincial economy to provide the foundation for further growth.

At the same time, a number of obstacles may influence the economic strategies we pursue. These limitations include:

- Alberta is a small participant in the global economy;
- the province is influenced by national and international policies and events beyond its control;
- a substantial part of our trade is concentrated in raw or semi-processed commodities and oriented to the United States market;
- many of our businesses are relatively small and have not pursued opportunities beyond the local market; and
- we are geographically removed from major global markets.

The Global Context

Many economists today believe that the global economy is going

through a period of fundamental structural change. These changes are permanent, not cyclical, and it may be a number of years before the causes and ramifications are fully understood. The changes affect what we produce, how we organize production, and even our concepts of how we define and measure wealth. The scale of economic change is at the global level, making many of the traditional approaches to economic planning and development less relevant today than in the past.

This viewpoint sees the recession and dislocation going on in the industrial economies over the last few years as the beginning of adjustment to these global changes. In developing a new economic strategy for Alberta, we can no longer assume that the usual business cycle will lead to recovery: we must develop a strategy based on a fundamental rethinking of economic growth and where Alberta fits in this global economy.

There are a number of key forces shaping the global marketplace today which must be considered in developing a new economic strategy for Alberta.

Globalization of Consumer and Industrial Markets

National boundaries are diminishing in their importance as business becomes increasingly global in nature. The emergence of more liberalized multilateral trade and supranational trading blocs such as the European Community has led to the use of global marketing strategies by business. This also makes possible the development of niche markets for specialized products and services.

The Shift to Knowledge-Intensive Industries

The concept of "capital" is undergoing a major change to encompass not only financial assets, but also intellectual assets, which consist of the ability to develop, interpret and apply knowledge. With much of the low-skilled and increasingly medium-skilled production shifting to countries offering lower labour and operating costs, the industrialized world must focus on more advanced and higher value-added goods and ser-

vices. These include industries such as telecommunications, pharmaceuticals, analytical instruments and information processing.

Emergence of a Global Capital Market

Advances in telecommunications and information technology, and the increasing role of multinational corporations and institutions, have led to the emergence of a global capital market. For Alberta, this means that we have to compete with the rest of the world in attracting new investment and financing.

Rapidly Changing Demographics

The population and labour force in many parts of the underdeveloped world have grown rapidly. Other trends include: increasing urbanization and the recognition of the need to better integrate one-half of our population — women — more into the economic mainstream. In Canada, immigration — particularly from Asia — has become an important component in the growth of our population. A relatively low birth rate and the aging of the population are prompting concerns about potential shortages of young, entry-level workers. In addition, the proportion of "retirees" will have significant implications on health care, social and other services.

Changes in the Geo-Political Structure

The last two years have seen dramatic changes in the world map. Changes include the collapse of centralized, Communist regimes in Eastern Europe and the former USSR and the rapid economic liberalization in that region; the increasing economic and political integration of the European Community; and the growing significance of Asia and the Pacific Rim. These changes not only open up new opportunities, but also provide new competition for the types of products and services that Alberta produces.

These are but a few of the major issues that are sweeping the world and which must be taken into account by Albertans as we debate our future economic roles and strategies.

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VISION

TO TOWARD
TO TOGETHER



Vision statement for the year 2000: A province which is made up of people and industries who can compete in a global environment and generate sufficient wealth to at least maintain our current standard of living with enough diversity to have a stable economy which maintains our environment and has long-term sustainability.

— Metro-Edmonton Economic
Development Team

Our vision of the early 21st century is one that is even more influenced and dependent upon technology. This dependence transcends all sectors of the economy . . . no sector of society is immune to the application of technology. The challenge we all share is to develop a technology culture that encourages the openness of new ideas and concepts, while preserving our social and cultural values.

— Alberta Microelectronic Centre

Discussion Paper Vision

In the *Toward 2000 Together* discussion paper published last summer, a possible vision for Alberta in the year 2000 was outlined:

Alberta is a diversified, internationally competitive economy which provides challenging employment opportunities and the means to maintain the quality programs that Albertans have come to expect in education, health and social services. Alberta is a leader in protecting the environment and ensuring that future generations can sustain prosperity, living standards and continued quality of life.

Albertans were encouraged to comment on whether they viewed this as an appropriate vision, to suggest amendments or to recommend alternatives

The importance of establishing a clear and realistic vision of Alberta's economic future was referred to many times during the consultation process for *Toward 2000 Together*. Most participants agreed that a vision which Albertans can share will be crucial in the development and implementation of Alberta's new economic strategy.

Comments on the Vision

Many Albertans believed that the vision in the discussion paper captures the interrelationships between the economy, the environment, and the ability to sustain a high quality of life. Still, there were a number of suggested amendments. These include explicitly recognizing the need to encourage private sector investment, to ensure equal opportunities for all Albertans, and to move away from "programs that Albertans have come to expect" toward more "affordable" programs.

Others said that the importance of increased cooperation among stakeholders must be better reflected in the vision statement. The notion of building on Alberta's strengths — a skilled and productive workforce, an entrepreneurial business climate, science and technology and a strong and diverse resource base — was also suggested. Some submissions noted that the vision fails to acknowledge Alberta's resource industries as a key contributor to economic prosperity.

Other Albertans expressed concern that the vision, even if amended, would be too generic or abstract, and could be applied to any jurisdiction in the world.

Respondents also commented on the processes required to implement a new economic strategy. Process suggestions mainly focussed in three main areas:

1. Innovation

With the current pace of change, the ability to innovate and quickly adapt will be crucial in the future.

2. Partnerships

Governments, businesses, labour and educators will have to establish more effective partnerships and cooperative approaches in the future. Processes for managing change must include all stakeholders.

3. Role of Government

Many respondents said that government needs to redefine its role and overall approach to economic development.

Developing Your Vision

Take a few minutes now to review the suggested vision statement and jot down some of your thoughts.

Does this statement challenge and motivate you?

Does it reflect all your ideas about the kind of province you want to build and live in?

Can this vision statement be used to help us make choices in developing Alberta's new economic strategy?

Think about:

- How will your children be living and working?
- Will their lifestyle be better — or worse — than ours?
- What sort of job opportunities will be available?
- How will education and training be different?
- How will technology change the way people live and work?
- How will communities be different?
- What will be Alberta's place in the world?

Alberta, a member of the global community, is a leader in sustainable development, ensuring a healthy environment, a healthy economy, and a high quality of life in the present and the future.

— Alberta Round Table on
Environment and Economy

Notes

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TOWARD
2000
TOGETHER





The Future of Resources

Introduction

Most Albertans would agree that the prosperity of the province has been based on the development of our agriculture and energy resources, and more recently our forest resources. The competitiveness and strength of these industries will continue to be fundamental to the future well-being of Albertans.

This section provides background for the second and third workshops on the future of resources. It examines a number of important opportunities and constraints related to the role of resources and resource upgrading in economic development. In the second workshop, participants will develop a summary of the major issues, which will be used as the basis for the third workshop on options and choices.

Adding value to our resources can be an effective means of diversifying our economy in sectors where we have a relative comparative advantage. Petrochemicals and plastics, food processing, and pulp and paper are just some of the industries that have successfully been developed in Alberta over the past two decades. These industries not only create new job opportunities, they also help stabilize the economy and provide new markets for our primary resource commodities.

Alberta's resource industries, particularly the energy sector, underwent considerable restructuring in the 1980s and significantly increased productivity through improved efficiency and investment in new technologies. Unfortunately, the resource industries face a number of problems, many of which are beyond their control. Grain and oil prices, for example, are currently well below what they were less than a decade ago.

Application of new technologies, world economic/political trends, developments in transportation economics and other factors have resulted in new sources of supply around the world. On the demand side, increased energy conservation, U.S.-European Community agricultural export subsidies, and the substitution of new materials are limiting markets for Alberta's commodities.

Environmental issues are also beginning to have significant impacts on both demand and supply for our resources and resource-based commodities. Environmental concerns will affect demand, as recycling, reduction and reuse programs are developed. They are also likely to impose serious limitations on resource production.

Opportunities and Constraints

1. Energy

Energy resources have attracted substantial wealth to the province, creating markets for many of Alberta's manufacturing and advanced technology industries. Alberta has become a recognized leader in exploration and production technology, and these products and services are exported around the world. Alberta oil and gas field equipment manufacturers and service firms generated more than \$200 million in export sales in 1990.

The 1990s are expected to present an entirely new set of challenges and opportunities for the Canadian energy industry. Consolidation and downsizing have been occurring over the past few years, and are expected to continue at least in the short-term.

The Alberta government is currently reviewing the royalty regimes for oil and natural gas, in consultation with industry.

The resource industries are the cornerstone of the Alberta economy. The resource industries' advantage is to tap immense supplies of resources, generate products for internal consumption and export, and provide sustained economic growth.

— Syncrude Canada Limited

Unless Canada upgrades its resource-based industries, it will be trapped in segments where investments tend to be inflexible and where its marginal costs are higher than major competitors.

— Michael Porter

Conventional Crude Oil and Petroleum Products

Conventional crude oil production is declining, with output in 1990 of just under 900 thousand barrels per day, about 37 percent lower than the peak year of production in 1973. Despite this decline, there is still significant potential in the remaining recoverable reserves. Price, technology development, and fiscal terms will largely determine the long-term economic health and potential of this sector in the future.

There has been considerable pressure from oil and gas producers to reduce royalties to keep the industry as active and competitive as possible. This would mean a significant decrease in Alberta government revenues. The issue for Alberta is how to support the industry while ensuring a fair return to the people of Alberta, who are the resource owners.

Oil Sands

The oil sands industry in Alberta represents a major challenge and opportunity. The oil sands are high-cost relative to today's market, so part of the challenge is to achieve further improvements in technology to lower costs. The upgrading portion of this technology, in particular, provides an opportunity for Alberta to be a participant, if not a leader, in the development, application and marketing of an important energy processing technology.

An important consideration for Alberta is whether further oil sands development should be one of the key components of Alberta's new economic strategy. This raises the issue of the extent to which government should be involved in financing or otherwise supporting future oil sands development.

Natural Gas and Petrochemicals

There is still a large opportunity to fully develop Alberta's abundant natural gas reserves. Both domestic and U.S. demand for gas is growing, as it is the preferred fuel of choice — one that is safe, reliable and clean burning. However, the Canadian Petroleum Association has noted that Alberta is a high-cost producer, given our distance to markets combined with our fiscal regime and regulatory environment.

The issue for Alberta industry and government is how best to adjust to changing market structures while improving the efficiency and competitiveness of the natural gas industry. An important aspect of this is how to expand markets and the required infrastructure for natural gas transmission and distribution, which requires long-term planning and financing.

The petrochemical industry has evolved from Alberta's natural gas resources to become one of the largest manufacturing industries in the province. More than \$6 billion has been invested in petrochemical and related facilities in Alberta since the late 1970s. Industry shipments amounted to more than \$3 billion in 1991, of which roughly half were exported outside of Canada.

The petrochemical industry accounts for 50 percent of the natural gas consumed in the province and approximately 12 percent of Alberta's total natural gas production. Petrochemicals are a world-scale industry and requires a business climate that is internationally competitive to attract new investment. An issue for Alberta is how to further expand the amount of value-added processing in the province, including the use of other feedstocks to produce a more diversified product mix. Potential also exists for the development of a more broadly based plastics industry, which would require the production of more intermediate petrochemical derivatives in Alberta.

Alberta's royalty structure has now assumed the position of the number one issue affecting the competitiveness and viability of our industry.

— Canadian Petroleum Association

Alberta must have a strong and growing economic base that generates export revenues, contributes to a strong tax base . . . provides technological spin-offs and creates multiplier effects through the economy. Such support can only come from expanding the resource and resource-upgrading industries which are the major wealth producing industries in the province.

— Canadian Chemical Producers' Association

Farming is both a business and a way of life. Maintaining family farms ensures widespread ownership of our food producing resources and contributes stability to our rural infrastructure.

– Alberta Wheat Pool

Diversification will certainly strengthen Alberta's economy, but, for the foreseeable future, it cannot replace our healthy and vital agriculture and energy sectors.

– Alberta Association of Municipal Districts and Counties

Coal

Alberta also has large reserves of coal, producing more than 32 million tonnes in 1991 valued at about \$510 million. Although substantial gains have been made in productivity improvements, Alberta's coal industry is faced with high transportation costs, labour rates and taxes that impede its ability to compete in export markets. In the future, the coal industry will also face competition from natural gas for power generation in Alberta, as well as increased environmental restrictions.

Electricity

The electric utility industry in Alberta consists of three major generating utilities, two of which are investor-owned — TransAlta Utilities and Alberta Power Limited — and one municipal-owned utility, Edmonton Power. Coal-fired thermal units generated almost 90 percent of Alberta's power supply in 1991, with the balance of generation coming from gas-fired thermal units, hydro-electric power and small wind energy projects.

Emerging issues and challenges for the electric utility industry and regulatory system include environmental issues, the role of independent power producers, the effects of conservation programs, the competitive process for new generation and transmission issues. While studies have shown that cogeneration projects are not economic yet, this sector may provide potential entrepreneurial opportunities in the future. Alberta Energy is currently undertaking a review of the regulatory system in the province. Environmental issues, such as potential restrictions on carbon dioxide emissions, could also have important implications for Alberta's abundant, low-cost coal reserves.

A major issue for electric power consumers is the Electric Energy Marketing Act (EEMA) which was introduced in 1982 to reduce rate disparities across the province. A public review of the Act is underway to determine if EEMA's objectives are still valid for the 1990s, and whether they are being carried out in the most effective and fair way.

2. Agriculture and Food Processing

Agriculture makes an important contribution to the Alberta economy, both at the primary producer and the secondary processing levels. Alberta's farm cash receipts, which amounted to an estimated \$4.1 billion in 1991, represent about 20 percent of the value of primary agriculture production in Canada. Livestock and livestock products currently account for about 56 percent of farm cash receipts, with the rest primarily coming from crops such as wheat, canola and barley.

The value of shipments from Alberta's food processing and beverage industry amounted to almost \$4.5 billion in 1991, contributing an additional \$1.1 billion in value-added to Alberta's primary agriculture production. The food and beverage industry represented nearly one-quarter of the province's total manufacturing output last year.

Similar to the energy sector, agriculture relies heavily on international export markets which are volatile and subject to political interference and price wars.

The ability to compete with subsidized production from other countries is a major problem for Alberta farmers. The Multilateral Trade Negotiations are attempting to reduce agricultural subsidies, but the prospects for success are unclear.

An important issue facing Alberta is how the agriculture industry and government will respond in the face of global pressures: whether to restructure in the face of ongoing competition or to try to compete with global subsidies.

Another issue is what can be done to further develop the agri-food industry in the province to provide new markets for Alberta's primary and processed agricultural products. New consumer trends, brought about by changing demographics and lifestyles, are clearly emerging and will continue to offer opportunities for the Alberta food processor.

Research and development are important factors in the expansion, diversification and competitiveness of our agriculture and food industries. Biotechnology and veterinary sciences offer exciting prospects for future growth and diversification. What is the potential for these activities as part of Alberta's new economic strategy?

Considerable public investment has been directed towards developing and rehabilitating the province's irrigation infrastructure in southern Alberta. The conservation and management of our water resource presents a continuing challenge for our agriculture industry.

Agriculture faces many other complex issues. The development and pricing of transportation infrastructure has a major impact on our competitiveness and on what products are grown and processed in Alberta. Environmental concerns and more stringent environmental regulations are likely to result in changes to current farming practices.

3. Forestry

The forest products industry has made significant gains in Alberta in recent years playing a major role in the province's diversification efforts since 1986. New pulp, paper, lumber and panel board facilities recently completed or under construction amount to more than \$3.5 billion.

This high level of new investment has created a highly efficient internationally competitive forest products industry in Alberta. In 1991, industry shipments amounted to almost \$1.7 billion with international exports exceeding \$1 billion.

With the development of the primary forest products industry (pulp, newsprint, lumber and panelboards) well underway, the next step is to achieve a higher level of value-added activity in order to generate more wealth from Alberta's forest resources. An issue for Alberta is how to identify and develop value-added products that can be profitably manufactured from Alberta's forest resources and how to attract investment in viable projects.

Alberta companies are producing a growing range of semi-finished and finished wood products such as aspen furniture, log homes, and specialty wood products, that are gaining increased recognition in international markets. This represents an important value-added component of the solid wood industry in Alberta.

The government is also developing a strategy to foster further development of the value-added solid wood industry for Alberta. This strategy will have its emphasis on providing technical assistance and financial advice to the small independent forest industry operations.

While Alberta's forest products industry is relatively modern, efficient and environmentally safe, it still faces many of the same challenges as the province's energy and agriculture sectors.

Expansion of the forest industry will create additional new employment in many towns in Alberta.

— Forest Industry Suppliers
Association of Alberta

Alberta needs to institute a rationalization program to determine the best uses of its forest resources — timber, water, fisheries, wildlife, access development, recreation, et al. What products produce the highest profit coupled with the greatest, total employment and with the best use of the resource.

These environmental issues can have significant implications for the international competitiveness of the Alberta forest products industry. For example, many U.S. states require up to 50 percent recycled fibre in newsprint. Alberta's current and future mills may need to import waste paper to maintain access to these markets. Similarly, some European countries are looking at legislation that could restrict the import of chlorine bleached kraft pulp. An issue for Alberta is how these changing environmental requirements can be addressed within a forest products industry strategy.

Notes

In preparation for your second workshop, following are a number of questions that may be used to guide your discussion. The workshop will identify the opportunities and constraints that the group believes are important in developing an economic strategy for Alberta, and prepare a summary to use as the basis for the third workshop on options and choices.

- 23

In this third workshop you will be developing options and choices related to the opportunities and constraints you identified in the second workshop. What choices will help you achieve your vision for Alberta?

1. How do we further encourage value-added resource development? Should the income tax system be used to encourage manufacturing and processing investment, or should we review government policies affecting input costs (i.e., resource royalties, regulation of electrical rates and natural gas distribution)?

3. What are the most important services government can provide to manufacturers and processors (i.e., skills upgrading and training programs, management development, trade and investment promotion)?
4. How can we encourage more resource conservation and environmentally safe industries and still improve our competitiveness?
5. What options or approaches could be used to increase collaborative efforts among governments, universities, research institutes and industry to further develop our resource-based industries?
6. How can we encourage the application of new technologies and processes to improve competitiveness in the global marketplace and reduce environmental impacts?

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TOWARD
2000
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Knowledge: Technology, Information and Innovation

The agricultural age was based on plows and animals that pulled them; the industrial age on engines and the fuels that fed them. The information age will be based on computers and the networks that interconnect them.

– Scientific American

In today's world, the potential for growth in a resource-based economy is being outstripped by innovation-driven economies.

– Calgary Research & Development Authority

The material-based manufacturing industry provided economic growth in the first three-quarters of this century. It is largely the information- and knowledge-based manufacturing industries that are growing now.

– Peter Drucker

Introduction

Many economists and experts are noting a strategic shift in the nature of the world's economy — from an industrial or manufacturing base to a knowledge-based economy. A knowledge-based economy turns information into knowledge, knowledge into intellectual capital and intellectual capital into an economic engine that will increase competitiveness and wealth. Growth will be dependent on a spirit of innovation to drive it and advances in technology to sustain it.

Only a decade ago, nations blessed with abundant natural resources could count on the export of those resources to support a high standard of living. In the new knowledge-based economy, it will be the interplay between computers, communications infrastructure and human knowledge that will determine a nation's standard of living.

The development of a knowledge-based economy will be essential to maintaining the competitiveness of Alberta's resource sector and to developing more sophisticated and higher value-added industry segments. Due to its historical dependence on the resource sector, Alberta, like the rest of Canada, is not as advanced as many of its competitors in developing and applying new technology — an integral component of a knowledge-based economy. Nevertheless, many Alberta resource firms have used new technologies to develop successful resource processing operations.

In addition, Alberta's advanced technology industry has grown from a handful of companies in the late 1970s to over 1000 companies in 1990, employing about 50,000 people. Completely new industry sectors, or clusters, have emerged based almost solely on the development of new technologies. Examples of these clusters include computing and software, biotechnology, health sciences and pharmaceuticals, microelectronics, advanced industrial materials and telecommunications.

Alberta Technology, Research and Telecommunications recently released a discussion paper entitled *Science and Technology in the New Alberta Economy* and followed up by consulting with key technology firms and educational institutions in Alberta. One of the main messages they received was that ongoing innovation and the development and application of advanced technologies and information systems will be essential to the continued prosperity of Alberta businesses in a highly-competitive global economy.

Opportunities and Constraints

1. Attitudes Toward Innovation

It has been suggested that, as a society, we do not sufficiently value knowledge or reward innovation; that we do not have a culture that welcomes change as an opportunity, approaches the world with curiosity and a thirst for learning, thrives on risk, encourages entrepreneurial attitudes, or celebrates success.

It will be necessary to encourage an attitude — a spirit — of innovation in Alberta. New ways of thinking may be just as crucial as developing new technologies in the province.

A knowledge-based economy will mean:

- Recognizing that change will be a continual part of our lives. Product cycles are becoming shorter, markets are changing rapidly, and what is state-of-the-art today may be obsolete tomorrow. We must respond by establishing a culture of life-long learning and nurturing a global perspective.
- Developing new ways of looking at individuals, so that Alberta can make the best use of its intellectual capital and unleash the greatest possible creativity. Alberta must learn to value its diversity — the diversity of gender, race, background, experience, perspectives and approaches.

- Thinking about knowledge as a product — looking for ways of exporting Alberta's expertise in everything ranging from health care to clean coal technology.
- Developing new, collaborative relationships between labour and management and the public and private sector.
- Viewing expenditures in R&D and education and training as long-term investments rather than short-term expenses.

2. R&D Investment and Commercialization

The development of a knowledge-based economy requires a significant investment in R&D. In Alberta, however, R&D expenditures by all sources equalled about 0.9 percent of our Gross Provincial Product in 1989. That's less than the Canadian average of 1.3 percent and less than half of the 2.5 percent average of the world's leading economies.

Compared to industry in other countries, many Alberta firms appear to underfund R&D. We must explore ways to encourage further private R&D investment in Alberta. One possibility is to use existing public R&D spending (e.g., by the universities or the Alberta Research Council (ARC)) to leverage more private R&D investment. Indeed the ARC is planning to increase the private sector portion of its total revenue from 35 percent to 50 percent by the end of the decade through expanded cooperative research programs with industry.

Financing R&D, however, is a major challenge for many Alberta firms since projects are often too far-reaching, risky and expensive for any one firm to handle. Small technology-intensive firms, in particular, find it difficult to secure long-term, "patient" capital. While the private sector is generally opposed to direct government financing, creative methods of assisting Alberta's high-tech firms need to be explored. The further development of industry research consortia, an approach used successfully by some sectors in Alberta and by many of Alberta's international competitors, may be one solution.

Alberta firms also have difficulty in obtaining financing to take high-tech products from the prototype stage to the production stage. This step usually requires funding for field or pilot testing and market testing. Venture capitalists are often reluctant to provide funding for this given the level of technical detail associated with many high-tech products.

There may also be opportunities to increase the commercialization of university-conducted R&D in Alberta. One possible alternative is to encourage more partnerships between academic researchers and industry R&D departments in order to move discoveries from the research stage through to the commercialization stage.

3. Technology Diffusion

In addition to developing our own technologies, they can be acquired from other sources and adapted for use by Alberta industries. Yet a recent Statistics Canada survey of manufacturing firms suggests that Alberta companies, like those in the rest of Canada, are slow to employ state-of-the-art technologies. Not only does this trend deny the province's technology industries a larger, more dynamic local market for their products, but it also puts Alberta's manufacturing companies at a competitive disadvantage.

On securing capital, we must develop a technology profile that is attractive to the international investors and venture capitalists. There is a growing interest in global tracking of technologies for investors who are looking for promising technologies.

— Centre for Frontier Engineering Research

Harvesting the fruits of Alberta's investment in science and technology requires effective technology partnerships among government, universities and the private sector.

— University of Alberta

Innovation and technology application are an integral part of the ability of Alberta firms to compete in the global marketplace.

– Alberta Microelectronic Centre

For most of our history, Canadians have prospered by relying upon the resources beneath our feet . . . in the information age, we will all need to rely on the resources between our ears.

– Charlottetown Evening Patriot

To succeed in the new knowledge-based economy, Alberta manufacturers will need to pay greater attention to quality management, labour training, international marketing and technological innovation (e.g., computer-assisted production techniques, information transmittal systems, applications of CAD/CAM, robotics and numerically controlled instrumentation). The further development of a knowledge-based manufacturing sector in Alberta will not only foster future growth and job creation, it will also help develop the products and enabling technologies to stimulate further growth in Alberta's resource industries.

Business services (which includes engineering, computer, communication, transportation and financial services) have played an integral role in enhancing the productivity and competitiveness of our manufacturing and resource industries. This sector has grown rapidly due to the increasing importance of knowledge as an input to the production of goods.

The role of business services will become even more important as they assist manufacturers and resource producers to develop new and better products, identify and penetrate markets, reduce operating costs, improve quality, finance new equipment and facilities, raise the capabilities of their workers and improve their management practices. Consequently, it is essential that Alberta's business services industries remain innovative, dynamic and outward looking in the face of increasing international competition.

4. Skills for a Knowledge-Based Economy

To conduct research and to develop and apply new technologies, highly skilled and innovative human resources are required. Yet many industry sources predict severe shortages of scientists, engineers, technologists and other skilled workers in Alberta by the end of the century. We need to examine ways to ensure a large base of such workers so that the province can develop new technologies at the same rate as its international competitors. For further information on this issue, see the theme section on Training, Education and Life-Long Learning.

Educational institutions, industry, and government in Alberta will need to work together to support a highly-skilled, innovative and adaptable workforce.

5. Infrastructure Requirements

Public sector investment in physical infrastructure such as transportation and utilities has been crucial to Alberta's prosperity in a resource- and industrial-based economy. We must now determine what sort of infrastructure will help us prosper in a knowledge-based economy.

Innovation depends on knowledge, and Alberta needs new ways of quickly gaining access to current information. Thus, a knowledge-based economy will require a new physical infrastructure to allow Albertans to quickly communicate, collaborate and exchange information and technology.

Other organizations which form an important part of Alberta's technology infrastructure include the Alberta Microelectronic Centre, the LASER Institute, the Centre for Frontier Engineering Research and TRILabs.

Options and Choices

In this third workshop you will be developing options and choices related to the opportunities and constraints you identified in the second workshop. What choices will help you achieve your vision for Alberta?

Following are several options related to the issues outlined in the previous section. You may use these as the basis for developing your own choices, or you may develop your own priorities.

1. How can we promote attitudes which encourage innovation?
2. How can we encourage more industry R&D? How can we encourage Alberta firms to acquire and apply new technologies sooner? Leveraging? Penalty provisions? Tax incentives?

3. How can we forge more industry collaboration on research initiatives? Is there a role for financial or tax incentives?
4. Is there more that can be done to improve/enhance the role of universities in developing and transferring technologies? If so, what?
5. Do we need increased investment in information and technology transfer infrastructure? Should the public sector, the private sector or both be responsible for this investment?
6. What sort of infrastructure will be required? What are the "highways" required in a knowledge-based economy?

Notes

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TOWARD
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Introduction

A skilled, well-educated workforce is essential for Alberta to remain competitive and prosperous in the coming decade. The shift to a knowledge-based economy will require increasing levels of competence and initiative on the part of all workers. Albertans will need new and updated skills and knowledge throughout their lives.

This section provides background for the second and third workshops on training, education and life-long learning. It examines a number of important issues related to the role of education and training in economic development. In the second workshop, participants will develop a summary of major opportunities and constraints, which will be used as the basis for the third workshop on options and choices.

We recognize that education has much broader objectives than simply economic development. This discussion, however, will focus on those aspects of education and training which will help Albertans have more productive, secure employment in the coming decade. It should also be noted Alberta's educational institutions are already addressing many of these issues through policy and public consultations processes: the Appendix to this workbook outlines a number of related initiatives.

Opportunities and Constraints

In the emerging knowledge-based economy, innovation and information will underlie the wealth of the new society, as intellectual capital replaces physical capital as the major competitive advantage. Many experts project increasing demands for education: for example, Canada Employment and Immigration estimates that 64 percent of the jobs created in the next decade will require more than a high school education, as compared to 44 percent in 1986.

1. Education Levels and Achievement Demands will Increase

Employer expectations will increase at all levels of the workforce. Basic entry workers will need sound literacy, mathematics and communications skills. A high level of technical competence will be required in industry, as new products and improved productivity will come from the innovative application of scientific and technical ideas and skills. Professional and business functions will require superior problem solving and communication skills.

Alberta currently has one of the best educated and most highly skilled workforces in Canada. About 27 percent of the Alberta labour force hold a post-secondary certificate or diploma and 14 percent hold a university degree. More Albertans are opting for post-secondary education and training than ever before.

There are, however, a number of disturbing trends. While demands for excellence in education are increasing, communities and the education system are facing pressures from students struggling to achieve basic skills. At a time when fewer unskilled jobs are available, Alberta's high school dropout rate is estimated at 30 percent—one of the highest in the industrialized world. And many Albertans still lack the basic skill needed to complete a standard application form.

Canada's level of industry training is far below that of other industrialized countries, and it is perceived that this contributes to lower productivity of Canadian workers. Canada ranks twentieth out of 23 industrialized nations in workforce training.

It is difficult to address issues related to achievement without getting into a "numbers game" or looking for scapegoats. However, there is a genuine concern that, despite the relatively large amounts of money spent on education, the capabilities, performance and productivity of Alberta's workforce may not help us be competitive in the global economy of the future.

Education fuels the economy. It shapes society. But it does through its product, the educated person. What is an educated person in the knowledge society?

— Peter Drucker

If the Alberta government wants to increase the diversification of the economy towards manufacturing, the planning must take into account the skills and attitudes required to establish and maintain competitive manufacturing enterprises. A start must be made by focussing on specific education and training needs, and fostering a manufacturing culture.

— Alberta Manufacturing Education Council

Students will need to function well at higher level competencies such as critical thinking, effective communications, technological applications and complex problem solving. This prepares them to deal with a constantly changing knowledge base and provides them with skills required for life-long learning and successful living.

— Alberta Vocational Centre
(Calgary) Faculty Association

The business community will have to adopt an attitude that their greatest asset is their employees.

— Town of Peace River

2. Better Science and Technology Skills Needed

Some experts believe that Alberta must shift from relying on primary resources to producing value-added goods and services. This “value-added” comes from applying technical, management and information skills to create new products and improve productivity. To be competitive in the global economy, therefore, will require a high level of scientific and engineering skills and innovative attitudes.

Alberta already has a strong scientific and research community based on the oil and gas industry, medical and biological research, and the telecommunications industry. Alberta currently has 10 engineers per 1000 population, compared to 4 per 1000 for Canada and 8 per 1000 for Japan. Alberta schools, colleges and universities offer strong programs in maths, science, engineering and technical subjects.

Why, then, do many Albertans voice concern about education and training in the sciences and technical fields?

At the elementary and secondary levels, international achievement tests for maths and science show that Alberta students perform well compared to those in other provinces, but the international results are mixed. A study comparing our system with that in Japan, Germany and Hungary found that in other countries maths and science concepts are introduced at an earlier age and in more depth. In addition, less than 14 percent of Alberta high school students take the subjects required for entry into post-secondary sciences or maths.

At the post-secondary level, the main issue is to reconcile the aspirations of students with the realities of the labour market, and establish the appropriate mix of programs and linkages to industry.

Some Albertans believe that, if our province is to become more science- and technology-oriented, the education system must lead the way. Others suggest that the private sector must show leadership by creating jobs and investing in research and development. The community should demonstrate enthusiasm for scientific inquiry, encourage innovation and initiative.

3. Linking Education with the Workplace

A recent survey of Edmonton high school graduates found that less than half felt their high school education had adequately prepared them for the world of work, and 70 percent said schools should spend more time preparing students for jobs.

More cooperation and better information flow between education and training institutions and the labour market will result in programs and services which respond more effectively to the needs of the marketplace.

Mechanisms to smooth the transition from school to work, such as work experience programs and updated practical arts and vocational programs, should also be implemented.

Apprenticeship programs are important in linking education and the workplace. A recent report from the Economic Council of Canada criticized Canadian apprenticeship programs as being too focused on construction and manufacturing, with too little emphasis on the expanding high-tech and services sectors.

Alberta recently reviewed its apprenticeship program and introduced new legislation and regulations to permit broader application of the system in the province. In a new program, Alberta students are able to get apprenticeship training while completing their high school diplomas.

Increased emphasis on entrepreneurship and small business education at all levels of the educational system will increase the awareness and skills necessary for starting and operating successful small businesses.

Within the education system, expanding the transferability of courses and credits, and granting advanced status between programs and institutions, will improve coordination between the different levels of the education system.

4. Creating a Life-Long Learning Culture

With technological and social change occurring at an ever accelerating pace, it will be essential to develop a "life-long learning culture" in Alberta. Technological change means that skills and jobs may quickly become obsolete.

A market-driven, service-based economy also means that jobs may change quickly, as new products and services are developed. Many workers change jobs and even careers at a rate previous generations would have found unimaginable. People in the workforce today can expect four or five such changes during their working years.

An increasingly diverse population and workforce is creating new challenges. Workers with only a high school diploma or less may require upgrading and/or retraining. Finding ways to involve these workers in a "life-long learning culture" is a challenge for education and business.

Increasing numbers of women have entered the workforce in the past decade; in the 1990s, there will be an increasing percentage of older workers. In addition, the number of Alberta immigrants has doubled in the past five years, with about 70 percent coming from non-English-speaking countries. What training will these groups need to help them enter and adapt to the workforce of the 1990s?

Another group with education and training needs is Native Canadians. The Native Education Project, in place since 1987, supports schools in their efforts to increase Native student success and awareness of Native culture and values. Nevertheless, the dropout rate for Native children in some remote Alberta schools may be as high as 70 percent. Few Native Canadians go on to post-secondary education, and their participation in industry training is low.

Creating a learning culture involves changing attitudes. Education must focus on developing the thinking skills, flexibility and willingness to learn new skills as well as the traditional basics. Individuals must take on more responsibility for their own training throughout their careers. Communities and business must work with the educational system to create the skills and attitudes necessary for life-long learning.

5. Partnerships in Education

If we are to effectively prepare Albertans for the new labour market, employers must share in the responsibility for education and training. The private sector will be increasingly called upon to cooperate with educational institutions by defining their human resource requirements, providing more work experience opportunities, and assuming more responsibility for job-specific training.

Business and industry may increasingly be responsible for funding training programs. Here, unfortunately, our record is poor. Only 30 percent of Canadian firms provide formal training, most of them larger companies. Per capita training expenditures by Canadian employers in 1987 were only one-half the level in the United States and less than one-quarter that in Germany. Quite often a company that does make a commitment to training finds its trained employees hired away by competitors. This "free rider" problem discourages company investment in training.

The Alberta government should have, as a top priority, the development of the province's human resources through imaginative and flexible approaches to education and skills training. This will recognize that people are the province's greatest resource and that education is an investment, not an expense.

— Medicine Hat College

The emergence of a highly competitive and integrated global economy, rapid technological innovation and an expanding knowledge base will continue to have profound impacts on our lives. These changes pose significant challenges and opportunities to everyone involved in the education of our young people.

— Alberta Education's Vision
for the Nineties

Government should encourage and foster a meaningful process of dialogue between the business community and the education system. The purpose of this dialogue will be to generate statements of common vision and purpose and lay the foundation through which both groups will work together to support meaningful change in the system.

– Ernst & Young

To address the complex issues involved in developing Alberta's human resources, public consultation processes are being used to define issues and develop directions. For example, the Round Table on Competitiveness and Training, recently organized by business leaders and Alberta Career Development and Employment, discussed crucial training issues. Another initiative has been the Future of Work project, by Alberta Labour, which brought together Albertans from all walks of life to discuss the future of the Alberta workplace over the next 35 years.

An extensive public consultation process by Alberta Education on *Vision for the Nineties ... A Plan of Action*, the government's commitment to improve education, is also bringing together a cross-section of Albertans. These discussions are increasing public interest in improving education and have identified the need for business to become more involved.

Questions to Consider

To help you prepare for your second workshop, following are a number of questions that may be used to guide your discussion. The workshop will identify the opportunities and constraints that the group believes are important to developing an economic strategy for Alberta, and prepare a summary of those issues to use as the basis for the third workshop on options and choices.

1. Should improving the basic literacy, problem-solving and communication skills of students entering the workforce be a priority? Do Alberta students have a level of achievement adequate to allow them to function well in the workplace?
2. Is increased training in science and technical subjects important in creating a competitive economy? Is the level of science, technology and other key subjects taught in Alberta schools adequate to prepare students?
3. Should more emphasis be placed on ensuring a smooth transition from school to the workplace? What can be done by schools, government and business to make this transition more effective?
4. Do we have the attitudes and structures in place to promote life-long learning?
5. Is it important for business and industry to play a greater role in promoting quality education and training?

Notes

Options and Choices

In this third workshop you will be developing options and choices related to the opportunities and constraints you identified as important for training, education and life-long learning. What choices will help you achieve your vision for Alberta?

Following are several options related to the issues outlined in the previous section. You may use these as the basis for developing your own choices, or you may develop your own priorities.

1. Would national standards and performance indicators in education and training improve the effectiveness and responsiveness of the education and training system? What should be done to reduce the dropout rate among Alberta high school students?
2. How can interest in science and technology be increased among Alberta students? Could involvement by business and professional groups be increased; for example, such as activities underway by Alberta Government Telephones, the Alberta Research
3. How can the training system be made more effective in meeting the needs of adult learners?
4. How can the training system be made more effective in meeting the needs of the unemployed?
5. How can the training system be made more effective in meeting the needs of the underemployed?
6. How best can government services be coordinated to ensure improved access to education and training by under-represented groups with particular educational needs?
7. What are some effective ways to encourage alliances between business, labour and governments to improve training and education?

Council and the Association of Professional Engineers, Geologists and Geophysicists of Alberta?

3. Should government and industry develop a comprehensive labour market and training information service?
4. Should government services to assist private sector employers with their training and apprenticeship needs be coordinated under a one-umbrella service?
5. What types of non-traditional program delivery and flexible learning arrangements would be most effective in meeting the needs of adult learners?
6. How best can government services be coordinated to ensure improved access to education and training by under-represented groups with particular educational needs?
7. What are some effective ways to encourage alliances between business, labour and governments to improve training and education?

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Additional Notes

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Introduction

In addition to coping with short-term market cycles, Alberta businesses are also facing some longer term structural changes as a result of increasing global competition. The future strength of Alberta businesses will largely be determined by their ability to compete successfully against other domestic and international competitors. Globalization — the result of technological advances, reduced trade barriers and the growing sophistication of consumer demand — will challenge Alberta businesses to respond with competitive products and services that people want to buy.

Close to one-quarter of Alberta's Gross Domestic Product (GDP) is based on exports to markets outside of Canada, and over 250,000 Albertans are either directly or indirectly employed as a result of international trade. Clearly, our future prosperity can only be assured by maintaining an internationally competitive economy which encourages private sector growth, investment, and the creation of new and challenging employment opportunities for Albertans. A strong, competitive economy will also be crucial in maintaining the education, health and social programs Albertans have come to expect.

This section provides a basis for your workshops on competing in a global economy. It examines a number of important opportunities and constraints in adapting to this new business environment. In the second workshop, the group will develop a summary of the major opportunities and constraints to use in the third workshop on options and choices.

Competitiveness and quality are the new standards of performance and price of admission to the business arena in the 1990s.

— Northern Telecom

It is absolutely essential for the long-term well being of Alberta, and indeed the nation, that governments realize that wealth must be created before it is consumed.

— Canadian Manufacturers' Association

Opportunities and Constraints

While the World Competitiveness Report places Canada fifth among 24 industrial countries, a strong rating, many of the criteria where Canada rates highly, such as natural endowment, may not help us much in the future. In some key strategic criteria Canada does very poorly, such as international orientation, which measures a nation's corporate presence in foreign markets, and future orientation, which assesses efforts to meet the challenges of a knowledge-based economy.

Exports of resource-based products have done much to make Canada and Alberta wealthy in the past and will continue to play an important role. Traditionally, Alberta has relied on relatively cheap resources for much of its competitive advantage. With greater international competition, and lower commodity prices, it is imperative that new methods of production be developed which improve productivity and increase the viability of resource-based processing and manufacturing.

1. Factors Influencing Competitiveness

Competitiveness is often defined as being "cost-based," with labour, transportation, raw materials and other input costs being the key determinants. While these are important considerations, our ability to compete is also strengthened through technological innovation and other improvements aimed at increasing productivity. Moreover, the quality of the products or services being offered is becoming increasingly important to competitive success.

Alberta's competitive strengths are reflected in our ability to design, develop, produce and market products and services with price and non-price characteristics superior to those of our competitors.

Most Albertans agree that competitiveness is the key issue in building a strong, diversified economy. However, some are concerned that Alberta's competitive position is eroding both domestically and internationally. A number of factors are cited as being responsible for this trend: slow productivity growth, increasing unit labour costs, an increased tax burden on business, a regulatory environment which is becoming more costly and complex, an overvalued Canadian dollar, and the growing level of public sector debt.

Alberta has a small population base, with a small local market. Distance from international and some domestic markets usually means higher transportation costs which may impede our ability to compete in certain markets. To a large extent, federal policies affect our ability to minimize this disadvantage.

There is also general agreement that the presence of internal barriers to trade within Canada constrains Alberta from becoming more competitive. Many have said that in this era of free trade with the United States, Alberta businesses should be able to trade as freely with other Canadian provinces as they now do with American states.

Effective environmental protection policies are widely endorsed by industry stakeholders. However, some have complained that these policies are significantly adding to the costs of doing business. Several mentioned interjurisdictional overlap and duplication in the area of environmental review and assessment as an example of the increased complexity and costs involved.

A supportive framework for business and investment, innovation, education and training, and greater collaboration among stakeholders is viewed as important. In fact, many Albertans believe these broader issues are critical if we are to respond quickly to both competitive challenges and new business opportunities.

2. Business and Investment Climate

Although it is ultimately the responsibility of industry to be competitive, a key role of government is to foster a business climate which allows companies to compete successfully. Some have argued that this also means providing more efficient government, eliminating government deficits, and reassessing programs and services in terms of current priorities and affordability.

Governments — federal, provincial and municipal — can have a significant impact on the cost of doing business through their policies and overall management of economic issues. Government policies which strengthen the role of market forces, maintain a competitive tax and regulatory environment, and encourage risk-taking, entrepreneurship and innovation all serve to stimulate investment and business development.

The Alberta economy has traditionally been investment-driven in terms of income and employment growth. Investment has at times accounted, for up to 40 percent of GDP, and has generally averaged about 30 percent over the past decade. Many of Alberta's future development prospects — advanced technologies, oil sands, heavy oil, petrochemicals, forestry, food processing and tourism — are capital intensive. Large amounts of new investment capital from both domestic and foreign sources will be required to take advantage of these opportunities.

However, as international capital markets become increasingly linked through new communications and information-based technologies, there will be greater competition for investment funds.

Industry must be able to operate within a competitive tax, fiscal and regulatory climate that is stable.

– Alberta Industrial Property
Taxpayers Group

Government should stick to infrastructure and business environment aspects of economic development; it should not be involved directly in the economy either through ownership or through direct financial aid to specific companies, except in highly exceptional circumstances of provincial importance.

– AltaCan Telecom Inc.

In order for Alberta to meet the world's challenge in competitiveness . . . we must recognize our strengths and build on them. Our priority must be the creation of new wealth through the application of advanced technology, an attractive tax structure and an educated workforce.

— University of Alberta, Faculty of Engineering

The government must ask itself not what portion of the budget should be spent on economic diversification, but how much spending should be directed to perpetuating the past and present (agricultural subsidies, drilling incentives, social service spending) as opposed to adapting to and creating the future (education, research, infrastructure, holistic health care).

— Edmonton Research Park

Provincial corporate tax policy is one area where there may be some scope to further enhance Alberta's competitiveness and provide specific investment incentives. While there are many factors affecting investment decisions, taxation is directly affected by government policy. Any incentives, however, will need to be evaluated against the importance of balancing the provincial budget.

3. Innovative Approaches will be Needed to Adapt to Change

Most Albertans recognize that the pace of change is accelerating and that the ability to innovate and quickly adapt will ultimately determine our competitive position in the global marketplace.

The linking of new, advanced and knowledge-intensive technologies with our traditional resource and manufacturing industries has certainly allowed many Alberta firms to compete successfully against suppliers from low-wage countries.

However, as trade barriers continue to come down around the world, competition from low-wage countries is expected to increase. Alberta firms will therefore have to place greater emphasis on technological innovation to reduce costs, improve productivity, and develop new products and services that others want to buy. Although price competitiveness will remain important, a reputation for quality, reliability and responsiveness to changing consumer demands will become equally, if not more important, in many industries.

For example, some Alberta manufacturers may decide to specialize in shorter production runs or undertake "flexible manufacturing." These firms will focus on meeting specific demands for specialty products in domestic or international markets. In this "niche marketing" strategy, the quality of a product or service, and the ability to respond and adapt quickly to emerging consumer demands, will provide the basis for competitive success.

4. A Highly-Trained, Skilled Workforce

A well-educated, highly-trained and skilled workforce will be essential to increasing productivity and improving Alberta's international competitiveness. There is no question that without sufficient skills, the workforce will have difficulty working with the new technologies and adapting to changing circumstances. For further information on this area, refer to the theme section on Training, Education and Life-Long Learning.

5. More Collaboration Among Stakeholders

Many Albertans see the need for new approaches to manage the process of economic and social change. Increased cooperation and collaboration among stakeholders, rather than adversarial relationships, are viewed as being necessary.

Partnerships can begin at the level of the individual firm. Ensuring a quality work environment and building a more cooperative, less adversarial industrial relations climate are seen by many as important objectives. At the same time, the ability of companies to introduce new technologies will require a workforce that is motivated to accept change and understanding of its own interest in improving productivity. Achieving these objectives may require new approaches to workplace organization.

To overcome the financial limitations of individual companies, particularly small and medium-sized companies, some firms are entering strategic alliances or joint ventures in such areas as marketing, distribution, training, commercialization of new technologies, and research and development. Most would agree that key stakeholders — governments, business, labour and educators — will also have to establish more effective partnerships and cooperative approaches in the future.

To help you prepare for your second workshop, following are a number of questions that may be used to guide your discussion. The workshop is intended to identify the opportunities and constraints that the group believes are important in developing a more competitive and dynamic economy in Alberta.

4. Is Alberta's regulatory environment too complex and costly? If so, in which areas?
5. Is competition from low-wage countries threatening the current market position of Alberta firms, either domestically or internationally? If so, in which products, services or industries?
6. Are key stakeholders — governments, business, labour and educators — working effectively together to meet Alberta's broader economic goals? If not, in which areas are more cooperative and collaborative approaches required? Are there areas or examples where cooperative approaches or "partnerships" have proven beneficial?

– Consulting Engineers of Alberta

– Coopers & Lybrand

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In this third workshop you will be considering options and choices related to the opportunities and constraints you identified earlier. What choices will help you achieve your vision for Alberta?

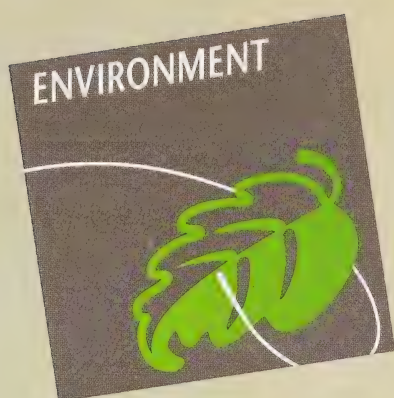
1. What should be the role of government in promoting a more competitive economy? Should government target those industries exhibiting significant growth potential (e.g., with either financial or non-financial assistance), or focus more on providing an attractive business and investment climate in the province?

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Introduction

The environment has become an issue of concern world-wide. Key to the dramatic awareness of the environment has been a fundamental redefinition of the problem. Over the last few years the focus on the environment has shifted from aesthetic concerns to health issues — from something “out there” to concerns about serious personal impacts.

However, environmental issues have yet to be seen from a much different perspective — that is, economic problems with associated costs and opportunities. North American companies tend to treat the requirement to respond to environmental issues as a cost of doing business. Elsewhere in the world, companies have turned environmental concerns into a source of competitive advantage.

Investment in addressing environmental issues has sometimes yielded benefits of reduced raw material and energy inputs; reduced waste and lower operating costs; new products and processes; and improved management practices, as well as a positive public image. German and Scandinavian companies have developed products and services that are both environmentally and economically sound. How do we turn perceived costs into opportunities?

This section will provide background for the second and third workshops on environment and sustainable development. It examines a number of important opportunities and constraints related to the role of environment in economic development. In the second workshop, participants will develop a summary of the major opportunities and constraints, which will be used as the basis for the third workshop on options and choices.

Sustainable Development

The link between environment and the economy has been called “sustainable development.” The term was popularized by the Brundtland Commission and defined in its 1987 report as:

Sustainable development ensures that the use of our resources and environment today does not damage prospects for their use by future generations.

For many of us, sustainable development is viewed as a long-term goal. However, it may be more useful to regard it as a set of basic assumptions or rules for living in our world. It is not a replacement phrase for “environment,” nor is it an excuse for “business as usual.” In other words, sustainable development should allow us to make progress on both the economy and the environment at the same time.

The concept of sustainable development requires a fundamental shift in thinking. Many environmental measures are currently viewed as not making economic sense. Similarly, many economic measures are thought of as not making environmental sense. In working towards linking the environment and the economy, measures must make both environmental and economic sense. In order to accommodate this shift in approach, we will need to develop planning processes that take into consideration both of these key aspects.

Opportunities and Constraints

1. Natural Resources and Skills Provide Business Opportunities

Alberta's rich endowment with a variety of natural resources represents a fundamental strength of our economy. This has also created some environmental challenges. Extracting and processing this resource base have given us a special expertise — expertise that we are beginning to market internationally and which will provide a host of opportunities in the future.

In many respects, Alberta's environment is a major drawing card. A clean and healthy environment is part and parcel of a good quality of life. Alberta must learn to use its quality of life to its strategic advantage in further developing and diversifying our economy.

— Alberta Urban Municipalities Association

Management of the economy impacts on more than just business. The economy impacts people and the environment. Alberta's economy should be managed to benefit all of society and the environment.

— Martha Kostuch

Public concern is creating a whole new market for alternative products, services and technologies. This new market will be served by a new industrial classification called the Environment Industry.

— City of Medicine Hat

Industry should be encouraged through R&D tax credits to seek advancements in environment products, services and technologies.

– Edmonton Chamber
of Commerce

The Government of Alberta needs to continue to provide leadership in striking the proper balance between job creation, economic development, and protection of the environment. Having environmental protection guidelines and policies clearly defined before projects are brought forward for approval creates more stability for investors and reduces public criticism.

– Forest Industry Suppliers
Association of Alberta

For example, Alberta is a leader in the development of hazardous waste treatment technology, and countries around the world have been sending representatives to the province to discuss possible joint venture agreements. In addition, Alberta's oil and gas sector is recognized for its leadership in emission control and reclamation — further potential areas for technology transfer and joint ventures in the world market.

Albertans are fortunate to be living in a province with abundant natural resources and a largely unspoiled environment. Our landscape is a strong lure for tourists from around the world. However, it can also be an attraction for companies seeking sites to establish or expand their enterprises.

The costs associated with maintaining and improving our air, land and water can have an indirect payback in increased investment and wealth generated in Alberta. We need to explore ways and means to capitalize further on the opportunities created through environmental expenditures.

2. Provincial Consultation Expertise

The Alberta government has taken a strong leadership stance on environmental issues while at the same time demonstrating appreciation for related economic impacts. Effective leadership requires looking at the big picture with a broad-based, consultative approach.

The Alberta Round Table on Environment and Economy was established by the provincial government in 1990 to provide recommendations on how the concept of sustainable development should be implemented in Alberta. Composed of 24 Albertans representing a diverse cross-section of society, the Round Table recently achieved a consensus on a vision and set of guiding principles for sustainable development and seeks to enrol all Albertans in that commitment.

The Clean Air Strategy for Alberta, published in 1991, resulted from a widespread consultation with a variety of stakeholders. This program was developed by the provincial departments of Environment and Energy in response to continuing national and international discussions on the impact of fossil fuels on global warming, acid deposition and smog. The program involved extensive discussion of issues and options by all major stakeholder groups throughout the province. The resulting vision for clean air in Alberta recommended a management framework to help identify the most suitable approaches for legislation, regulation, education and research and development.

3. Regulation and Market Forces

The government has also drafted the Alberta Environmental Protection and Enhancement Act. The proposed act consolidates a solid base of existing environmental legislation under a single comprehensive regulatory umbrella. It will allow government to respond to new and emerging environmental issues, providing an integrated approach that will result in straightforward, streamlined and effective laws for Albertans. The act also allows for the possibility of incorporating a market-based approach to regulation.

Many businesses have expressed concern that increasing government regulations have made planning for expansions and new ventures both costly and lengthy. On the other hand, by demonstrating leadership in establishing tough environmental standards, we can press for similar standards on an international basis. In addition, for the short-term, we may need to work with less developed nations who require assistance in meeting new and more stringent standards.

Many stakeholders in the *Toward 2000 Together* process have recommended a "market-based" approach to complement environmental regulation. A number of organizations both within and outside government have undertaken studies on the various ways that a market-based approach might be implemented in Alberta.

In a market-based approach, such as in the use of tradeable emission permits, the government creates a market by fixing the amount of pollutant that can be emitted within a region. The government then issues a permit to each participant for the total allowable emissions for that region. The permits can be bought, sold or traded by existing or new industries. Experts believe that approaches such as tradeable permits allow the private sector to achieve environmental objectives in a cost-effective and innovative way.

Public Awareness Needed

Key to developing a thorough understanding about sustainable development is for the general population to become empowered and knowledgeable. There is a need for a public education process that promotes both environmental and economic literacy in the school system and beyond, so that all citizens share in a common vision.

Questions to Consider

In preparing for your workshop on opportunities and constraints, following are a number of questions that may be used to guide your discussion. The workshop will identify opportunities and constraints that are important to developing an economic strategy for Alberta. The summary you prepare will serve as the basis for the third workshop on options and choices.

1. What does sustainable development mean within the context of Alberta, and how should it affect our economic strategy?
2. From an economic development perspective, do more stringent environmental standards simply imply higher costs? Or is there also an opportunity to create a commercial advantage through being a leader in environmentally sound industries?
3. Are public expectations outrunning the legislative process with regards to environmental issues? If so, how can a balance be achieved between government, industry and public consultation over the development of proactive legislation?
4. How can society change entrenched attitudes towards economic development and environmental protection in order to encourage and promote the concept of sustainable development?

The government must look for ways to reduce the administrative costs imposed by complex reporting requirements and by the ever-widening regulatory processes.

– Canadian Petroleum Association

Sustainable development must be defined to mean: economic decisions must be environmentally sound; government policies must anticipate and prevent environmental damage; polluters must pay for environmental harm; and citizens have the right to participate in decision making without having to prove they are directly affected.

– Edmonton Friends of the North

Notes

Options and Choices

In this workshop you will be developing options and choices related to the issues you identified in the second workshop. What choices will help you achieve your vision for Alberta? Following are several related options. You may use these as a basis for developing your own choices, or you may develop your own priorities.

1. How should the concept of sustainable development be promoted in Alberta?
2. Should the continued development of the environmental industry sector in Alberta be encouraged and promoted?

3. Regarding government policy:
 - Should the current tax system be redesigned so that it is specifically geared to discouraging harmful activities, thus taxing waste rather than wealth?
 - Should there be new tax credits to support private sector research and development in the environment?
 - Should market-based approaches be used in environmental regulations?
 - Should the Alberta Heritage Savings Trust Fund be used to help mitigate current environmental problems?
4. How should economic and environmental literacy be promoted among all Albertans to ensure that everyone embraces the vision of sustainable development?

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Community-Based Economic Development

Introduction

For a community to develop it must first build on its economic strengths and its human resources. Alberta has prospered as a result of the effort and initiative of people living in communities; in turn, communities have provided support for businesses and industries.

This section will provide background for the second and third workshops on community-based economic development. In the second workshop, participants will develop a summary of the major opportunities and constraints, which will be used as the basis for the third workshop on options and choices.

Where does a community look for new investment?

One approach focuses on attracting investment from outside the community; another seeks to achieve growth from within. The two approaches are not mutually exclusive, but a number of studies confirm what is probably a well-known fact. Most small businesses are located in a particular community not because of the usual location factors but because that is where the owner chooses to live. It is these local businesses that provide stability and are prepared to invest time and money back into the community.

Quality of life issues are becoming increasingly important in terms of being able to attract outside investment as well as keeping entrepreneurs in the community. A safe and clean community, good educational and training facilities, recreational opportunities, and cultural amenities are important factors in a community's ability to attract and sustain business development.

Opportunities and Constraints

1. A Community-Based Approach to Local Development

The Alberta government launched the Local Development Initiative (LDI) in 1989 to seek ways to help Alberta communities grow and prosper. The Minister's Council on Local Development, composed of non-government community representatives, held forums in 22 communities across the province to hear local views.

The Council developed a framework of 10 principles to stimulate local development and identified priorities for government action. While the initiatives may not be sufficient to completely reverse the trend toward rural depopulation, they may help ensure a good quality of rural life for those who choose it.

Through the public forums held by the Minister's Council on Local Development and *Toward 2000 Together*, the messages were very clear regarding the desire and need for communities to take charge of the revitalization and future development of their local economies. It is the people who live in the community who have the greatest stake in shaping its future.

Communities will need support to help them develop their local capabilities. Information and training on human resources development, leadership, management and entrepreneurial skills, and information networks will need to be provided to foster business development.

Other support may include the promotion of entrepreneurship, self-employment and home-based businesses, assistance in identifying and taking advantage of business opportunities, and a financial structure to support local initiatives. Volunteers and their contribution to community development must be recognized, with the training and support to encourage a strong volunteer base.

All parts of the province have the potential for strong economic growth, and the provincial and local governments must work to ensure that no structural impediments exist which might prevent any community from contributing to the province's overall wealth. Community development must be initiated and led by the community itself.

— Alberta Association of Municipal Districts and Counties

Government should play a facilitating role in encouraging Alberta's regional communities to manage their own developments.

— Athabasca Regional Economic Development Association

In many small towns across this province, the problem is not generating good business development ideas or finding a well-educated person to do the job, the problem is financing — getting the capital to underwrite a solid business proposal.

— Clearwater Regional Economic Development Board

The government needs to support community initiatives in line with the Local Development Initiative final report and recommendations. Communities need access to information and creative frameworks to assist in financing sustainable new small business ventures.

– Town of Slave Lake

2. Smaller Communities and Rural Alberta

For those Albertans who live in smaller communities, many believe that they have the best lifestyle possible. They feel very strongly that the quality of life in Alberta's rural areas must be maintained. They also recognize that a small population base does not provide sufficient resources to support all the amenities that are available in larger centres. Some have suggested that the most effective approach to rural economic development would be for communities to work together in regional partnerships.

Some communities have done just that. The towns of Brooks and Bassano, Eastern Irrigation District, County of Newell No. 4, and villages of Tilley, Duchess and Rosemary have formed the Newell Region Economic Development Advisory Committee to help reverse depopulation and declining employment opportunities.

As another example, the Siksika Economic Development Corporation has been formed to serve as a bridge between the Siksika and prospective investors; to provide business opportunity information; conduct negotiations; contribute equity and assist in employment development and training. The organization has established a number of successful enterprises, including a \$5 million retail complex.

These are examples of innovative approaches to regional cooperation which enhance the viability and growth prospects of smaller communities.

3. "World-Class" Cities Needed

In Canada, important changes are taking place in where people choose to live. In Alberta, over 60 percent of our population now lives in Edmonton and Calgary.

Cities are driving economic growth in many regions. Large, healthy urban areas are able to provide a stabilizing influence on cyclical swings. Some respondents have stated that our large cities, Edmonton and Calgary, need to become "world-class" cities in order for Alberta to become a strong player in the global marketplace. For our cities, being "world-class" may mean specializing in areas of excellence that are internationally recognized.

Edmonton and Calgary, along with a number of municipalities, have both initiated strategic planning processes, bringing together a variety of stakeholders. They have identified their strengths, potentials, and areas for improvement; they have defined their goals and directions, and developed implementation plans.

Each city took a different approach in developing its strategic plan and a different focus in their objectives. Calgary has developed a vision to position itself to compete in the 21st century with the focus on globalization. Edmonton will try to position itself as the capital of Western Canada. Both cities' goals include support for the business community and strengthening and expanding their economic base.

While both cities have certain similarities, they also have some distinct qualities. This combination should be used to their advantage, with the cities providing complementary support to each other and sharing the benefits of cooperation. A healthy competitive spirit between the major cities needs to be promoted, but competition for the same business or the duplication of facilities may be counter-productive.

Inter-municipal cooperation should be encouraged and competitiveness discouraged, by legislation if necessary.

– Al Duerr, Mayor of Calgary

4. Changing Role of Municipalities

All jurisdictions face the conflicting forces resulting from globalization of markets and increased demands for decentralized authority. The paradox is concisely expressed as "think globally, act locally."

Municipal and local authorities want greater involvement in the development of policies affecting them. At the same time, economies have become more interdependent and integrated at the global level, which reduces the scope and impact of national and provincial policies.

Communities group people of like concern. They are small enough to be able to get things done — solutions to local problems are easier to understand and fight for. Their scale is more manageable. Municipal governments are closer to their citizens than other levels of government; they have the opportunity to be more closely in touch with the aspirations of their constituents and to respond quickly.

At the same time, municipal governments are under increased financial pressure. Citizens are seeking more accountability from municipal politicians to keep taxes down, yet demand for services is continuing to increase. The pressure is increasing for municipalities to seek innovative solutions to these problems.

Municipalities need to be asking themselves what infrastructure will be required to nurture an innovation-driven economy. What will they need in terms of roads, airports, high performance computer centres, educated brainpower and electronic highways? Should local governments be looking for new models of providing these services through public/private partnerships and joint ventures?

Municipalities have increased responsibility for economic planning at the regional level. Calgary has shared its planning results with other communities in southern Alberta and Edmonton has initiated a regional strategic planning process with surrounding municipalities.

5. Tourism and Other Economic Development Opportunities

Some important areas of major economic opportunity have emerged in rural Alberta. One of these areas is tourism development.

Tourism is an industry where growth can be encouraged through grass-roots involvement at the community level. While we have successfully promoted our natural scenery, beauty and associated natural assets in the global marketplace, Alberta's tourism products and services are being diversified through active participation at the community level.

The Rocky Mountains will continue to be the predominant attraction in Alberta for both residents and non-residents, but efforts are being undertaken to promote the other natural scenic assets of Alberta as well. Our cities are becoming more cosmopolitan, providing shopping, festivals, theatre and sporting events that will continue to attract visitors. Alberta's heritage network of attractions and events is continuing to diversify, with many of these attractions located in rural areas that have been non-traditional areas for major tourism development. Identification of future opportunities in rural areas will diversify the tourism industry and strengthen the ability to package tourism and spread economic benefits.

As part of developing a provincial tourism strategy, Alberta Tourism, Parks and Recreation has been involved in a public consultation process — *Tourism 2000*. This initiative is intended to provide a framework for achieving industry goals through a true partnership and shared responsibility among industry, government and Albertans.

Other opportunities for rural economic development exist in the areas of manufacturing, alternative energy and agricultural and wood processing.

The existing partnership between Alberta Tourism, Parks and Recreation and the private sector must be expanded and improved. While much of this process is taking place now, both partners must ensure that this process be allowed to continue and grow.

— David Thompson Tourism Council

Social health and the quality of human relationships are strongly bound up with jobs, income and education. Abused women are more likely to come from living with unemployed men and hungry children come from families where unemployment is prevalent.

— Association of Human Services
in Alberta

Indians have been around for thousands of years. We were the Alberta economy. We're serious and we want to participate.

— Ron Many Heads, Siksika
Economic Development
Corporation

6. Social and Demographic Changes

Communities are often on the “front-line” in dealing with social and demographic issues that impact on community-based development. Some of these issues include:

Continuing In-migration and Immigration — levels of inter-provincial in-migration and international immigration to Alberta are expected to remain high, placing increased demands on services including training, social assistance, English as a second language programs, and settlement services.

Fundamental Changes to the Traditional Family Unit — increasing numbers of women in the workforce will bring greater emphasis to issues such as daycare, maternity leave, flexible working arrangements, pay equity and affirmative action policies.

The Aging of the Alberta Population — by the year 2016, persons over 65 years old will be the largest age group in Alberta. Changes in population structure will significantly alter the demands for programs in the areas of health, education and social services.

Growing Recognition of Aboriginal Issues — approximately 5 percent of Alberta's population is Native, of which one-third live in either Edmonton or Calgary. High rates of illiteracy and unemployment among Natives will place increased demands on education, training and employment opportunities.

Questions to Consider

To help you prepare for your second workshop on opportunities and constraints, following are a number of questions that may be used to guide your discussion. The workshop will identify the opportunities and constraints that the group believes are important to developing an economic strategy for Alberta, and prepare a summary of those issues to use as the basis for the third workshop on options and choices.

1. What can be done to encourage inter-community cooperation to achieve common local and regional goals, while maximizing the use of limited resources?
2. What types of local economic development opportunities offer the greatest potential? Should there be a focus on tourism for all communities? Is it important that Alberta has balanced regional growth across the province?
3. Should there be a priority placed on addressing the issue of rural depopulation?
4. What should government set as its priorities for helping communities to revitalize their economies?
5. In what areas are Edmonton and Calgary recognized as world-class cities? What can be done to enhance the cooperation and coordination between Alberta's two largest cities?
6. What impact will emerging social and demographic trends have on Alberta's economy and workforce?

Notes

Options and Choices

In this third workshop you will be developing options and choices related to the opportunities and constraints you identified as important for community-based development. What choices will help you achieve your vision for Alberta?

Following are several options related to the issues outlined in the previous section. You may use these as the basis for developing your own choices, or you may develop your own priorities.

1. What are the responsibilities of the various stakeholders (local community members, business, educators, government, etc.) in developing our communities? How can partnership among the key stakeholders be successfully developed?
5. In sectors like tourism, how do we better match the products and services in which we have a potential competitive advantage with the needs and expectations of the marketplace?

Notes

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This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

TO TOWARD
TO TOGETHER

Related Alberta Government Public Consultation Initiatives

The Alberta government has undertaken a number of initiatives to obtain the views of the public and stakeholder groups on key issues of importance to the long-term health of the provincial economy. These initiatives have in many instances involved broadly-based consultations across the province. Albertans have been encouraged to reflect on a wide variety of issues ranging from environmental concerns to employment and training, agriculture, municipal financing, and science and technology. The comments and insights from these consultations are important sources for additional input into the *Toward 2000 Together* initiative.

Following is a summary of the more significant consultative initiatives undertaken by the Alberta government. If you would like further information on these initiatives or copies of material provided in support of them, please contact the designated government employee at the telephone number shown. Limited quantities of materials produced in support of these consultations will be available at the Premier's Conference on Alberta's Economic Future in Calgary.

Alberta Advanced Education

Contact: Communications Director
(403) 427-7160

Capital Funding Policy

In 1991, post-secondary institutions were invited to respond to a set of proposals related to the provision of funding for capital items (which may range from buildings to equipment, and their maintenance or replacement). With institutions now having submitted their reactions, the development of a revised policy is underway.

Responding to Existing and Emerging Demands for University Education: A Policy Framework

In 1990, the Department of Advanced Education released a dis-

cussion paper regarding the future of university-level education in Alberta, describing five scenarios, and inviting responses to these along with the proposing of other scenarios. The majority of responses favoured building on our existing university structures and programs rather than creating new institutions, although there was also limited support for forms of degree-granting capability at the public colleges.

Student Assistance Reviews

The Minister of Advanced Education has recently undertaken two major reviews in the area of student assistance: (1) in 1989 and 1990, a review of loan/grant programs, which led to revisions to several facets of those programs; and (2) in 1991 and 1992, a review of the Heritage Scholarship Program which involved a widely consultative process. The preliminary outcomes of this activity are currently under consideration by the Students Finance Board and the Minister.

Transfer Issues

The Minister of Advanced Education has requested the boards of universities and colleges to initiate two reviews: (1) identify problems with the existing university-transfer program, and recommend changes which will rectify those problems; and (2) identify ways in which students might more readily receive "advance credit" when moving from one institution to another, in areas beyond university-transfer.

Tuition Fees

During 1990 and 1991, the Minister of Advanced Education conducted a review of the tuition fee policy which had been in place since 1982. Of particular interest were: (1) the relative contributions of the individual and society in sharing the costs of post-secondary education; and (2) removing barriers to the delivery of programs to off-campus locations. Following extensive consultations with a variety of stakeholders, a revised tuition fee policy was introduced in 1991.

Alberta Agriculture

Contact: Chairman, Planning Secretariat (403) 427-2417

Agricultural and Food Industry Consultation Process

In February 1992, as part of its strategic planning process, Alberta Agriculture embarked on an industry consultation to develop a shared vision of the agriculture and food industry. A widely-held vision for the industry will provide focus for developing strategic direction on issues such as competitiveness, changes in international trade, the need for self-reliance, sustainable development and intergovernmental responsibility for regulation and programming.

Consultations have focused on discussions with a group of industry stakeholders to reach consensus on industry trends, strengths and weaknesses, a shared vision of the industry, and challenges/opportunities to reach the vision. A draft document will be made available to the public in May 1992 for reaction and comment over the summer.

Alberta Career Development and Employment

Contact: Communications Director (403) 422-4495

Alberta Round Table on Competitiveness and Training

In September 1991, about 100 representatives from a cross-section of business, labour, government and education met to discuss issues related to competitiveness and training in a conference jointly sponsored by industry and Career Development and Employment. A variety of issues were addressed, but there was special interest shown in the quality of Alberta's education system, cultural attitudes towards performance and excellence, and the need for partnerships to meet the significant economic and training challenges that lie ahead. A report and follow-up video materials resulting from this initiative are available for public review.

The Alberta Workforce to the Year 2000

This paper summarizes major trends expected to affect the labour market in the 1990s and examines their public policy implications. Its purpose is to serve as a discussion document. Issues reviewed include the global marketplace, cyclical and seasonal shifts, the knowledge-based economy, the maturing populations, changing immigration sources, fairness and environmental concerns.

Alberta Consumer and Corporate Affairs

Contact: Communications Director, (403) 422-3935

The Future of the Securities Marketplace in Alberta

In November 1991, 30 senior members of the securities and corporate finance industry met with Consumer and Corporate Affairs. Two sub-committees were subsequently established to look at ways to streamline the regulation of the securities marketplace in Alberta and to promote the formation of capital. Reports have been prepared making some recommendations, including the creation of a futures exchange in Alberta for the oil and gas, agriculture, lumber and mining industries.

Alberta Education

Contact: Communications Director (403) 427-2285

Vision for the Nineties ... A Plan of Action

The Alberta government has acknowledged that improvements must be made in basic education for the economic well-being of Albertans. *Vision for the Nineties ... A Plan of Action* was published last October and is the provincial government's commitment to improve education throughout the 1990s.

Thirteen priority directions for improving education for our young people are identified in the plan.

These include reducing the dropout rate, focusing on science and technology, preparing students better for the workplace, improving the achievement of Native and immigrant students, strengthening basic skills, and better coordination of health, education and social services for children.

More than 50 meetings have been held throughout Alberta to review the plan. Participants represented a cross-section of Albertans. The meetings generated public interest in improving education, and provided an opportunity for the various stakeholders to hear each others' views. The discussions confirmed the importance of education in ensuring a strong economic future for Alberta and recognized that many aspects of the plan are important for our continued economic success.

Consultation also took place with educational organizations and a cross-section of Albertans prior to the release of the first provincial results report, *Achieving the Vision 1991*. Alberta Education met with school board trustees and superintendents after the report was released to encourage them to do similar assessments and reporting for local school systems.

Alberta Energy

Contact: Communications Director, (403) 427-8697

Cogeneration and Waste Energy Generation Review

In mid-1991, Alberta Energy commissioned a study "to assess the barriers or inducements to cogeneration and waste energy generation in Alberta to determine commercial or market potential." The terms of reference for the study were developed after consultation with and input from industry. When completed, the study will be distributed to stakeholders for comment. The review complements several other consultative processes undertaken by Alberta Energy including the Clean Air Strategy for Alberta, Fuel

Use Policy Review and the Regulatory Review of Electrical Generation and Planning in Alberta.

Fuel Use Policy Review

Since 1973, coal has been the preferred fuel for base load electrical generation in Alberta. This policy was based on a recommendation from Alberta's Energy Resources Conservation Board. Concerns for the environment, natural gas deregulation and technological advances in gas turbines, among other factors, make a review of this policy appropriate at this time. On March 24, 1992 the Minister of Energy announced a review of Alberta's fuel use policy. The review will be carried out with the full involvement of the coal and natural gas industries, electric utilities, independent energy producers and other interested parties.

Natural Gas Royalty Review

Closely related to the Natural Gas Royalty Simplification Project is the Natural Gas Royalty Review. The Natural Gas Royalty Review is a result of extensive discussions between the Minister of Energy and Department of Energy, and the natural gas industry and related service industries regarding the current royalty rates. Detailed analysis of the royalty regime is now being carried out in cooperation with, and the involvement of, the energy industry. The results of the analysis will be reviewed by a Department of Energy/Industry Steering Committee overseeing the Natural Gas Royalty Simplification Project.

Natural Gas Royalty Simplification Project

In response to concerns from the natural gas industry, the Minister of Energy directed the Department of Energy to undertake, in consultation with the industry, a thorough review of the existing natural gas royalty system, and how it is administered. The review is being undertaken under the direction of a Department of Energy/Industry Steering Committee. Industry representatives include senior officials

from the Canadian Petroleum Association, Independent Petroleum Association of Canada, Small Explorers and Producers Association of Canada, and Canadian Association of Oilwell Drilling Contractors. The Steering Committee is chaired by the Deputy Minister of Energy. Recommendations are expected to be submitted to the Minister during the Summer of 1992.

Oil Royalty Review

Detailed analysis of Alberta's oil royalty regime is now being carried out by the Department of Energy. The analysis will be reviewed with the industry through consultations.

Regulatory Review of Electrical Generation and Planning in Alberta

Alberta Energy initiated a review of Alberta's approach to regulating electrical generation and planning. The review is in response to suggestions and comments from electrical utilities and industrial consumers.

The review involves a two-phase consultation process, which was developed by a task force of representatives from stakeholder groups including electric utilities, industrial consumers, rural electrification associations, municipalities and small power producers.

In the first phase of the review, several issues concerning the planning process, plant ownership, relationship to the Electrical Energy Marketing Act (EEMA), mandates of the Energy Resources Conservation Board (ERCB), and Public Utilities Board (PUB) were examined and discussed. A discussion paper summarizing the issues and these discussions will be released for public comment. The comments received will be used as input for recommendations, which, when ready, will be distributed for further public review.

The second phase of the review will begin this summer. In this phase, the task force will focus on potential regulatory changes. Legislative changes may be recommended to improve the electrical planning process and to clarify the roles of

the ERCB and PUB in regulating the electric industry. The final recommendations will be integrated into the recommendations resulting from the separate review of the EEMA, which is now under way.

Review of the Electric Energy Marketing Act (EEMA)

The primary objective of EEMA, which was introduced in 1982, is to reduce rate disparities across the province for consumers served by different utilities. EEMA creates a common wholesale rate by averaging the generation and transmission costs of TransAlta Utilities, Alberta Power Limited, and Edmonton Power.

The Hon. Rick Orman, Minister of Energy, appointed an independent Review Panel (March 1992) to examine whether EEMA's original objectives, established in 1982, are valid for 1992, and whether the Act's objectives are being implemented effectively.

The Panel has requested written submissions from interested Albertans regarding their views on EEMA's objectives and its impact on electricity rates across the province. Public hearings will be held this spring (May 25 - June 16), and a report with recommendations to the Minister is expected by July.

The outcome of this review process could have significant implications on regional economic development in Alberta. In 1991, for example, EEMA transfer payments from TransAlta (paid by TransAlta's customers) to Alberta Power and Edmonton Power amounted to more than \$14.3 million.

Alberta Environment

Contact: Communications Director, (403) 427-6267

The Alberta Environmental Protection and Enhancement Act (AEPEA) and Regulations

The proposed Alberta Environmental Protection and Enhancement Act (AEPEA), Bill 53,

was introduced to the Legislative Assembly of Alberta in June 1991. This legislation represents an important step in the Alberta government's commitment to the protection, improvement and wise use of our environment.

Significantly influenced by public involvement at every stage of its development, the Act implements many of the original recommendations proposed by the Environmental Legislation Review Panel, which held public meetings throughout Alberta in late 1990. The revised legislation amalgamates Alberta's nine existing environmental acts into one integrated act in order to provide an overall framework for environmental protection and enhancement. This new integrated approach to legislation will yield streamlined and effective laws for Albertans and eliminate duplication among existing acts. It will also contribute to effective intergovernmental cooperation on environmental issues, while allowing Alberta to carry out constitutional responsibilities for the management of our environment within the province's boundaries.

During the past year the public has been invited to review Bill 53 and forward comments and suggestions to the government. It is now anticipated that the revised legislation based on this input will be tabled in the Alberta Legislature during the present spring session.

In September 1991, Alberta Environment made public the draft regulations for the proposed Alberta Environmental Protection and Enhancement Act. Public input was actively sought and several briefing sessions were held throughout the province in the Fall of 1991. All public submissions are currently being reviewed and outstanding issues identified. Further public consultation meetings are planned for spring 1992 to resolve these issues.

It is anticipated that the redrafted regulations will be finalized in mid-1992. A summary document will then be made available to the public.

Alberta Forestry, Lands and Wildlife

Contact: Communications Director,
(403) 427-8636

The Forestry, Lands and Wildlife Advisory Committee

This Committee was recently formed to strengthen public consultation in natural resource management. The Committee will serve as a continuing forum for communication between members of the public as represented by various environmental, industry and special interest groups, and the department on policy and program matters relating to Alberta's public lands and natural resources.

The Committee will be reviewing, for example, development of a Natural Resource Management Policy for the Department, as well as other related policy initiatives of a significant nature.

The function of the Committee as a barometer of public opinion on natural resource management issues is consistent with the Department's strategic mission for the next decade. This vision is outlined in the document: "Creating Our Future," which discusses the Department's values and operating philosophies for public involvement in natural resource management.

Integrated Resource Planning Program

The Integrated Resource Planning Program is an interdepartmental planning process for public land and resource management. Public consultation is an essential component of the planning process which focuses on land and resource allocation, issue resolution and decision-making in a negotiation/consensus building environment.

A Natural Resource Management Policy

The government recently announced its intentions to implement a Natural Resource Management Policy for Alberta, which will encompass the management of forests, fish, wildlife and

public land resources. Such a policy would recognize the need to manage Alberta's natural resources for sustainability, the integrated use of resources and a healthy environment in harmony with the needs of Albertans.

Developing the policy will consist of two phases; process development and policy development. A departmental task force has recently completed a process framework: the next stage will examine the various issues. To ensure that the final product is highly value-added, the Forestry, Lands and Wildlife Advisory Committee will review the policy from its multi-stakeholder perspective. It is anticipated that the Natural Resource Management Policy will create a need for more specific natural resource policy issues to be addressed such as the Forest Conservation Strategy, or a Public Lands Strategy for Alberta. The public will be consulted during the development stages of these policy issues.

This initiative is critical to ensuring that our natural resources are managed in a manner that ensures Alberta remains "a leader in protecting the environment and ensuring that future generations can sustain prosperity, living standards and continued quality of life". A Natural Resource Management Policy will also help Alberta achieve economic development that is based on sound resource management and environmental sustainability.

Public Involvement in Forest Management and Utilization

The Department is also examining how the public can play a greater advisory role in the allocation of forest resources. For example, public involvement was solicited as part of the Department's recent initiative to allocate wood supply in the Manning area.

Public consultation in the forest management process can also be achieved through the use of Public Liaison Committees. These Committees are made up of local residents and special interest groups

located in areas covered by Forest Management Agreements. They work closely with FMA holders to provide input on the company's detailed forest management plans. Public Liaison Committees, or other forms of public consultation in forest management, should foster a greater understanding between the industry, the general public and government as all these groups meet to exchange dialogue over the most effective and representative method of managing provincial forest resources.

The steps which the Alberta Forest Products Association (AFPA) and provincial environmental organizations have taken to meet is another positive sign that industry and special interest groups recognize the benefits of consultation over confrontation. Their meetings are particularly noteworthy because they have been taking place without government involvement. The AFPA Forest Care and the Alberta Forestry Association's Focus on Forest programs are two other initiatives demonstrating the improving relationship between industry, government and the general public in forest management.

Alberta Labour

Contact: Communications Director, (403) 427-5585

The Alberta Future of Work Project

This project, initiated in June 1990, was designed to involve Albertans in a discussion of what the Alberta workplace will become during the next 35 years. It provided the opportunity for Albertans from different backgrounds to develop better understandings and to explore future needs and opportunities relating to the workplace. It also allowed individuals the opportunity to relate the broader changes and trends occurring in society to their own industry or place of work.

A total of 100 participants represented the public and private sectors, labour and special interest groups. Small discussion groups in

Calgary and Edmonton met over a period of 12-18 months. Opportunity was also provided for participants to meet in larger meetings, with a final conference in Kananaskis in November 1991.

Employment Standards Review

A review was initiated to determine whether current employment standards are still appropriate to meet the needs of the changing nature of work and the workforce and to determine how to improve Alberta's system for setting and enforcing workplace standards.

The review was conducted in two phases, including an internal review and a public consultation process. Public consultation involved the release of a discussion paper in December 1991 inviting Albertans to express their views. Four one-day symposia were held in Grande Prairie, Red Deer, Edmonton and Calgary, attended by 200 participants representing unionized and non-unionized workers, employers, industry, social agencies, Native people, students, educators, etc.

A consensus on several key themes emerged. Albertans feel strongly that there is a need for public input in setting employment standards. There was support for an "abuser pay" system and improved education and communication of employment standards issues. Based on public input, a White Paper is expected in spring 1992 which outlines the government's proposals and strategy.

Alberta Municipal Affairs

Contact: Communications Director, (403) 427-8862

Municipal Government in Alberta: A Review of Yesterday and Today. A Proposal for Tomorrow. Phase One Report of the Committee Exploring a New Municipal Government Act for Alberta

In 1987, a review of the Municipal Government Act (MGA) was undertaken. An extensive public consultation process was initiated to obtain public input on the effect of legisla-

tion on municipal governments in Alberta. Eight discussion papers on the MGA were produced and circulated to over 4,000 interested parties for their comments and suggestions.

The responses to the discussion papers were reviewed by a committee of 11 members including two MLAs, three public members-at-large, five representatives from the Municipal Associations, and one City of Edmonton representative. The committee submitted a final report to government in March 1991 recommending changes to the MGA.

A government bill introducing new legislation is to be introduced at the Spring Sitting of the Legislature, with passing of the bill expected in the spring of 1993.

Among other impacts, the new MGA proposes to provide more flexibility to municipalities through empowering local governments to become financially involved in the economic development of their communities.

Alberta Research Council (ARC)

Contact: Communications Director (403) 450-5224

A Vision to the Year 2000

This plan sets out goals and strategies for the 1990s designed to help Alberta industries develop and apply the technology needed to meet global competition. New dynamic partnership arrangements will be established with the private and public sectors. One stated goal is for the Council to receive half of its revenues from non-provincial government sources.

Alberta Technology, Research and Telecommunications

Contact: Communications Director (403) 422-0567

Science and Technology in the New Alberta Economy

This discussion paper was prepared in January 1992 to complement the

Toward 2000 Together initiative. It focuses on the science and technology development issues facing Alberta and the options and choices available to the government, outlining issues related to research and development, human resources, technology adaptation and application, securing capital, collaboration, management and marketing skills, and targeting important technology streams.

Following the paper's release, the Department held discussions with various stakeholders in Alberta's advanced technology and scientific communities in order to solicit their input. The stakeholders, in turn, funnelled their input directly into the *Toward 2000 Together* process through presentations at the public forums and written submissions.

Alberta Tourism, Recreation and Parks

Contact: Director, Corporate Development (403) 427-4322

Tourism 2000 — A Vision for the Future

This initiative is designed to address the need for a provincial tourism strategy that will help the province and the industry meet the global challenges of the 1990s and beyond. Tourism 2000 is intended to provide a framework for achieving industry goals through a true partnership and shared responsibility among industry, government and Albertans.

The development of the provincial tourism strategy is guided by a 12-member Tourism Advisory Panel, representing a wide range of Alberta interests including the tourism industry and other tourism-related sectors.

A broad consultation process generated significant input from the private sector, interest groups and organizations and the general public. Two symposiums, in Calgary and Edmonton, 10 regional workshops across the province, a survey of 1,800 Albertans and written sub-

missions are helping to identify challenges and opportunities, establish a vision for tourism and determine future strategic directions for the industry.

The provincial tourism strategy, in the form of recommendations from the Tourism Advisory Panel to the Minister of Tourism, Parks and Recreation, will be completed in June 1992.

Alberta Transportation and Utilities

Contact: Merriene Duncan 220-5502 (Ray Basset (403) 427-7944)

Transportation Requirements for the '90s — The Van Horne Institute, University of Calgary (in cooperation with Alberta Transportation and Utilities)

In March 1992, 28 transportation experts representing carriers, shippers and planners participated in a round table discussion of future transportation needs, including infrastructure, carrier operations and regulations, both direct and indirect. The conference was held at the University of Calgary by the Van Horne Institute for International Transportation and Regulatory Affairs.

The group was divided into three smaller groups: passenger, domestic and international freight. At the end of two days prioritized recommendations were recorded from all the groups and submitted to the *Toward 2000 Together* initiative.

In the passenger group the issues addressed included intermodal integration, regulation, finance, taxation, marketing, research and development, and education.

Freight transportation discussions focused on several issues such as regulatory burdens, taxation, system productivity, federal legislation, infrastructure renewal, environment, safety, education and research.

Some of the major recommendations are:

- harmonization of regulations, interprovincial and with the United States;
- creation of a level playing field regarding taxation, to permit Canadian carriers and shippers to compete;
- improve system productivity;
- work for changes to federal legislation;
- improve safety, education and research; and
- look to innovative financing to improve the transportation system.

Northern Alberta Development Council (NADC)

Contact: Communications Director, (403) 624-6277

Northern Alberta into the 90's

The Northern Alberta Development Council was created as an advisory council to the provincial government in 1963. In 1973 its mandate was expanded to investigate, monitor, evaluate, plan and promote development in northern Alberta.

A major objective of the Northern Alberta Development Council has been to increase the level of public participation in the planning and design of delivery systems for government services in northern Alberta. The Council facilitates input into government decision-making by way of public meetings held for the receipt of briefs, Council-sponsored conferences and workshops, practical research and interdepartmental co-ordination.

Public meetings are regularly held in communities across northern Alberta. Members of the public are encouraged to participate in these open forums by presenting prepared briefs. Briefs may be verbal or written. Since 1973, the NADC has received more than 2300 briefs. Based on these submissions, Council has initiated more than 125 major research studies and program reviews.

In November 1990, the NADC held a major conference in Grande Prairie on the future of northern Alberta. It has recently published a position paper on northern development which describes some of the key development priorities of the north in the 1990s.

Multi-Departmental/Multi-Stakeholder Consultative Initiatives

Alberta Round Table on Environment and Economy

Contact: Communications Director, (403) 427-6267

In the late 1980s the National Task Force on Environment and Economy was established by Canada's Environment Ministers to recommend new approaches to integrate environmental protection with economic decision-making. One of the most important recommendations of this Task Force was to create a special round table forum in which all sectors — government, business, labour, academic, public interest groups, etc. — could cooperate on preventative strategies and influence decision-making. It was unanimously agreed that the implementation of round tables and their success would be fundamental to achieving environmentally sound economic development in Canada.

In May 1990, the Alberta Round Table on Environment and Economy was formed. The group includes 24 members from a broad cross-section of Alberta stakeholders. Also members of the Round Table are Alberta's Ministers of Economic Development and Trade and Environment. The group's mission is to work to achieve sustainable development in Alberta by providing leadership, policy advice and long-term strategies to government, business and the general public.

The Round Table published its first report in October 1991 entitled "Alberta: Working for a Sustainable Future." The report outlines the Round Table's vision for Alberta

regarding sustainable development. Also included are a set of principles that are required if this new vision is to be realized.

The report is now being circulated to Albertans. Public consultation is being planned to generate dialogue on how to implement the vision.

Clean Air Strategy for Alberta — Alberta Energy and Alberta Environment

Contact: Communications Director (403) 427-6267

Launched in 1990, this consultative program was developed in response to continuing national and international discussions on the impact of fossil fuels on global warming, acid deposition and smog. Its purpose was to encourage public discussion in Alberta on air emissions resulting from the production and use of energy. Its three objectives were to: 1) identify and clarify the most important issues associated with energy production and use which need to be addressed in developing a clean air strategy; 2) outline practical and achievable actions which can be taken by consumers and producers to reduce emissions; and 3) develop policy and program recommendations to present to the provincial government.

The Clean Air Strategy for Alberta was carried out in four phases and input sought both from the general public and individuals with specialized knowledge in these matters. To allow adequate time for participation, the consultation process was extended from September 1990 to October 1991.

The program involved an issues and options workshop with representatives from major stakeholder groups, regional sessions in eight Alberta centres, a summary workshop involving stakeholder representatives and a final report, issued at the end of 1991. This report presented the recommendations of the Clean Air Strategy to the Ministers of Energy and Environment for consideration by Cabinet and encouraged the Alberta government to adopt a proactive plan of action.

Local Development Initiative (LDI) — Minister Responsible for Rural Development

Contact: Communications Director, (403) 422-9156

The LDI was initiated in 1990 in response to concern about depopulation in smaller communities. The primary goals of LDI have been to define the role that the government should be playing in small community revitalization, to highlight actions that the government should be taking to serve that role, and to develop and deliver initiatives that meet the needs of the people in Alberta's communities.

LDI was a two-stage process. The first stage was the Minister's Council on Local Development, which conducted 23 public forums throughout the province and received input from approximately 800 participants representing 250 communities and special interest groups. The second stage was to solicit feedback from a report issued on the forum's discussions.

At the same time, two Assistant Deputy Minister Committees were established, one on Programs and Services, and the other on Local Capability. These committees conducted an internal review of government policies, procedures and programs to determine gaps in the current program structure and the requirements needed to build on local capabilities.

On February 20, 1992, Premier Don Getty appointed the Hon. Shirley McClellan as Minister responsible for Rural Development and implementation of LDI. Proposals have been made on various aspects of LDI; one major initiative, a local development bond program, is currently being considered.

Local Government Financing Review Committee — Premier's Council on Local Government

Contact: Communications Director, (403) 427-8862

The Local Government Financing Review Committee (LGFR) was set up by the Premier's Council on

Local Government in November 1990. The LGFRC was given the responsibility to consider five key areas affecting local government financing — local government financing of education, assessment practices, local government taxation, provincial contribution to local governments and intergovernmental financial relationships.

Represented on the LGFRC are the three local government associations, the Alberta School Board Association, the Departments of Municipal Affairs, Alberta Education and the Provincial Treasurer. The LGFRC has completed its review and is discussing recommendations arising from the reports and the meetings.

Review of Post-Secondary Apprenticeship Training — Advanced Education and Career Development and Employment

Contact: Communications Director, Advanced Education (403) 427-7161

In 1991, an interdepartmental apprenticeship task force was established to develop recommendations for post-secondary apprenticeship programs. The recommendations, expected in mid-1992, will be based on consultation with a variety of institutions, boards, agencies and individuals who are directly or indirectly involved in post-secondary training of apprentices. Areas to be examined include funding, tuition fees, growth in enrolments, new initiatives, unnecessary duplication, alternate delivery, viability of programs and policy. A discussion paper has been prepared on the issue of whether to include public post-secondary apprenticeship programs under Advanced Education's tuition fee policy, which would allow institutions to charge apprentices a tuition fee.

The Water Management Policy and Legislative Review — Alberta Environment, Alberta Water Resources Commission and the Environment Council of Alberta

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The Water Management Policy and Legislative Review process was officially announced on July 4, 1991 with the release of the discussion paper entitled "Water Management for Alberta — Challenges for the Future." From the beginning it was decided that, due to the complexity and long history of water legislation in Alberta, it would be better to deal with this issue separately from the review of the other provincial environmental legislation. Once revisions to the water legislation are complete, the process of integrating it into the proposed Environmental Protection and Enhancement Act can begin.

An integral component of the review is a three phase consultative process involving the Alberta public. Phase I has now been concluded. It included: release of the discussion paper, a public survey concerning Alberta's water policies, public interest groups awareness meetings, an Alberta Water Policy Futures Workshop hosted by the Environment Council of Alberta, and public workshops at 16 locations throughout the province. Phase II will start in Spring 1992. It will include a release of a summary report of public comments received in Phase I, release of draft water management legislation and regulations with a policy guide for in-depth public review and public workshops and meetings. Phase III will involve preparing final water management legislation and regulations.

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ECONOMIC DEVELOPMENT
AND TRADE

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